



Confident and cautious candidates

Explaining under-representation of women in Danish municipal politics *Working paper*

Dahl, Malte ; Nyrup, Jacob

Publication date:
2018

Citation for published version (APA):
Dahl, M., & Nyrup, J. (2018). *Confident and cautious candidates: Explaining under-representation of women in Danish municipal politics *Working paper**. (pp. 1-46). Copenhagen University.

Confident and cautious candidates: Explaining under-representation of women in Danish municipal politics

Malte Dahl* and Jacob Nystrup†

November 28, 2018

Abstract

Why are women under-represented even in democratic and egalitarian countries? Previous research considers either demand-side or supply-side explanations. We integrate both perspectives in a least-likely case for the under-representation of women, namely the municipal councils in Denmark. The data is from a candidate choice conjoint experiment, a survey among potential candidates and data on the actual pool of nominated candidates. On the demand-side, we show that there is no pro-male bias in general or in combination with other candidate traits nor that traits evaluated positively by voters appear more frequently among actual male candidates. On the supply-side, we find that women are less likely to be interested in running for political office. This is primarily because women assess their own political qualifications significantly lower than men. The gender imbalance is therefore driven by an under-supply of female candidates. This suggests that we should focus more on supply-side factors to overcome the gender imbalance.

*PhD fellow, Department of Political Science, University of Copenhagen.

†DPhil Candidate in Politics, Nuffield College, University of Oxford.

Introduction

Women remain under-represented in democratic politics. This is also the case in Danish local politics, where female legislators comprise one third of the seats. In the last decades, the share of women in the parliament has climbed towards 40 %, but in local politics the ascend has stagnated and the share of women in the city councils has remained fairly constant since 1989. The persistent gender-gap is puzzling considering that Denmark is culturally egalitarian, has experienced early women’s enfranchisement and range among top EU nations for gender equality (Kjær and Kosiara-Pedersen 2018). The gender-gap is all the more important when considering that Danish municipality councils constitute consequential political institutions. Municipalities are responsible for more than half of all public spending and have control over important policy areas, including primary education, elder care, job activities, and cultural activities. Elections to the city councils are both salient, well-attended by voters and characterized by a low barrier to entry. In sum, there are no immediate structural reasons to why local politics should be a man’s world. This makes it an interesting case for studying inequalities in representation. If women remain underrepresented, where we expect it least, we will have a harder time fighting under-representation, where we expect it the most.

The literature identifies two major approaches to gender-gaps in political representation. The *demand-side perspective* is concerned with understanding the causes of under-representation by considering the demand for specific types of candidates among parties, political gatekeepers, or voters. It is well-established that voters exhibit preferences for political candidates with specific personal characteristics, especially at low-information elections where those characteristics might serve as a heuristic for how candidates will behave if elected (Cutler 2002; Sen 2017; Atkeson and Hamel 2018). If voters hold negative stereotypes against female candidates, it may contribute to undermining women’s electoral prospects. There are several ways gender stereotypes may disadvantage women. First, voters may simply hold a pro-male preference when voting. However, a growing body of research indicates that under-representation of women is not a result of a direct preference for male candidates (Kirkland and Coppock 2017; Teele, Kalla, and Rosenbluth 2018; Schwarz, Hunt, and Coppock 2018; Kage, Rosenbluth, and Tanaka 2017; Lawless and Pearson 2008). Secondly, voters may evaluate certain traits differently depending on candidates’ gender – applying so-called double standards. For example, voters apply a double standard if traits with negative valence serve as a greater disadvantage to female than

male candidate (Barnes, Beaulieu, and Saxton 2018). Thirdly, voters may have preferences for certain *types* of candidates with specific demographic profiles that are, for various reasons, more frequently found among male candidates (Teele, Kalla, and Rosenbluth 2018). Fourthly, it may be that certain types of voters, who are important for the electoral outcome, consistently vote against female candidates.

The second stream of research focuses on *supply-side factors*, specifically by exploring reasons for gender-differences in candidate emergence. A prominent explanation is that gender disparities in high-level "pipeline professions" result in a gender-skewed pool of eligible candidates (see a review in Fox and Lawless (2004)). Other explanations consider the different opportunity structures of male and female candidates. For example, previous research has shown that family structures prevent women from running for office since they spend relatively more time on household-responsibilities (Campbell and Childs 2014; Fiona 2001), that different political issues spurs interest among men and women (Carroll and Sanbonmatsu 2013; Bækgaard and Kjær 2012), and that ambitions and self-perceived qualifications differ across gender (Fox and Lawless 2010; Shames 2017). These supply-side explanations find support in recent experimental studies that shows how it is harder for political gatekeepers to recruit political candidates among women (Butler and Preece 2016; Preece, Stoddard, and Fisher 2016).

The objective of this study is to integrate demand and supply-side explanations to advance our understanding of political representation of women in the context of the politically important Danish local councils – a least likely case for the under-representation of women. In order to examine demand-side explanations in terms of voter-preferences, we conduct a candidate choice conjoint experiment in which we examine how voters evaluate multiple pairs of hypothetical local political candidates described by several randomly assigned features. We endow the candidates with features such as age, job, political experience, and policy position. The conjoint experiment enables us to explore if voters – both on average and across subgroups – exhibit preferences that benefit male candidates directly or in more subtle ways. Moreover, we compare the features from the conjoint experiment with observational data on the characteristics of the actual pool of political candidates at the 2017 election. This allows us to explore if specific traits are more frequently found among male or female candidates and hence serve as indirect advantages to male candidates.

Second, we turn to supply-side explanations and explore gender differences among potential

candidates in willingness to run for a seat in the local councils as well as the mechanisms that undergird potential differences. Specifically, we focus on four explanations that previous literature has identified as important: (1) self-assessed political qualifications; (2) perceived chances of winning a seat; (3) interest in local politics; and (4) time constraints. Our sampling strategy is important for our possibilities to answer these questions. Most previous studies examine supply-side explanations among participants that are already active in politics (Campbell and Childs 2014) or are well-positioned to offer themselves to political office (Fox and Lawless 2011; Kjær and Kosiara-Pedersen 2018). While this is clearly important in advancing our understanding of candidate emergence, it also introduces concerns of selection.¹ Engaging with politics is a socialization process, and gendered attitudes about running for office may evolve in certain environments. Hence, sampling potential candidates *before* they have selected into political spheres is an important perspective when considering differences in emergence. In the present study, we therefore focus on a representative sample of adult Danish citizens as they are all *potential candidates* for the local elections. The high accessibility to the local elections and the large share of candidates – one out of 400 voters run for office at any given local election – makes it reasonable to consider ordinary voters as potential candidates. Hence, the context gives us an unique opportunity to explore mechanisms underlying candidate emergence at an early stage in the political process.

The results yield two main insights. First, in the candidate choice conjoint experiment we find that female candidates are not disadvantaged – if anything voters on average favor female candidates. This finding is consistent across various subgroups of voters. Moreover, when interacting gender with other traits, we find no signs of double standards either. Otherwise identical candidates are evaluated very similarly across gender. Finally, we find no evidence for the notion that fewer female candidates hold beneficial traits compared to men in the actual pool of candidates. Altogether, the evidence suggests that voters' preferences for specific types of candidates or traits are not to blame for the gender gap. Secondly, on the supply-side we find substantial gender gaps in the willingness to pursuing a career in local politics; women are much less likely to see themselves as potential candidates. We find that this is primarily

¹The pool of highly eligible candidates may look very different than the pool of all potential candidates. There are, however, exceptions to this approach, see for example Fox and Lawless (2014) who explores political ambitions among high school and college students.

because women see themselves as being less qualified for political office than men. Moreover, we find that women are less confident that they will be elected should they run for office, are less interested in local politics and report that they have less time to engage in local politics. In a setting that can be viewed as a least-likely case for women's under-representation, we find that supply-side factors are better at explaining the gender-gap than demand-side factors. This suggest that we should focus more on encouraging women to run for office if we want to overcome the gender imbalance.

Representation in local politics

The normative case for representation has been made in terms of its assumed effects on the nature and direction of public policy. Politicians are more likely to advance the interests and preferences of groups that share their characteristics, including their profession, class, ethnicity, and gender (Campbell, Childs, and Lovenduski 2010; Campbell and Wolbrecht 2006; Burden 2007; Carnes 2012; Grose, Mangum, and Martin 2007; Juenke and Preuhs 2012). Consequently, scholars have found that representation also affect substantive outcomes for these groups (Norris 1996; Chattopadhyay and Duflo 2004; Nye, Rainer, and Stratmann 2014; Chattopadhyay and Duflo 2004).² In the following sections, we first consider the literature on demand-side explanations with a focus on voters' preferences, and secondly we review the literature on candidate emergence.

Demand-side explanations: Candidate characteristics and vote choice

An abundant research has demonstrated that voters hold gender stereotypes when evaluating political candidates. A widely accepted view is that voters perceive men as more competent and assertive, and women as more compassionate, warm, and emotional (Dolan 2014; McDermott 1998; Paul and Smith 2008; Huddy and Terkildsen 1993).³ By the same logic, women are

²For example, evidence from Norwegian local politics, a context very similar to the Danish, suggests that gender representation matters to legislative priorities in local politics (Bratton and Ray 2002).

³One way to categorize these stereotypes is as either trait stereotypes or belief stereotypes (Huddy and Terkildsen 1993). Where trait stereotypes are based on the physical or emotional traits of women (e.g. women are more competent on compassion issues compared to men),

assumed to be more competent in specific policy areas such as general welfare policies and the environment compared to men, while men are thought to be more competent at dealing with economic development, trade, taxes, and agriculture (Dolan 2010; Brown, Heighberger, and Shocket 1993; Huddy and Terkildsen 1993; McDermott 1998). These stereotypes have been found to be repeated in media coverage of male and female politicians (Carroll and Schreiber 1997; Devitt 1999) which might further shape and constitute the attitudes toward the role of women in the political arena (Kittilson and Fridkin 2008).

Despite the evidence on gendered stereotypes, an increasing body of research finds no evidence for a direct voter-bias against female candidates. In an American political context, many scholars argue that ideology or partisanship are the main determinants of voting behavior and more important to candidate choice than candidates gender (Dolan 2014; Lawless 2015). Moreover, a line of research suggests an easing of stereotypes toward female candidates (Dolan 2010; Burrell 2008; Fridkin and Kenney 2009; Hayes and Lawless 2015) and that females are now perceived to be as competent as male politicians (Carnes and Lupu 2016; McElroy and Marsh 2010). When considering experimental research on voter preferences in conjoint experiments, a majority of them in fact show a small net preference for women (see Schwarz, Hunt, and Coppock (2018) for a review).⁴

Even though the evidence does not indicate a direct disadvantage for female candidates, there are ways that gender could still play a role in shaping electoral outcomes. Gender stereotypes can work in more subtle ways. For example, voters may apply so-called double standards by evaluating traits differently for men and women. For example, if voters evaluate a lack of political experience or extreme political attitudes more harshly when the candidates are female compared to their male counterparts. Moreover, certain traits that voters pay attention to may characterize male and female candidates with different frequency. We can imagine that voters hold preferences for certain demographic traits – e.g. candidates that have more experience, are older, and well-educated – that fit male candidates. This is related to the notion of "double-belief stereotypes are based on the ideologies held by women (e.g. women are more liberal compared to men). If voters have an underlying preference to be represented by a male or female candidate, this predisposition is likely to be partly determined by these stereotypes (Sanbonmatsu 2002).

⁴There are however, also studies that find a gender bias against women, see for example Ono and Yamada (2016).

ties” described by Teele, Kalla, and Rosenbluth (2018) as *‘when desirable traits require more investment, or are associated with different burdens’ for certain groups.*’ Hence, even if the evaluation of the traits is unconditional on gender, voter preferences for certain characteristics can serve as a mechanism underlying the gender difference in outcome.⁵

In the present study, we therefore consider four potential ways that female candidates may be disadvantaged due to voters’ preferences. First, we examine if voters have a direct preference for candidates that are male over candidates that are female. Secondly, we consider this across a number of subgroups of voters. Thirdly, we explore if the evaluation of traits are conditioned on the candidates’ gender – in other words we examine if voters apply double-standards. Fourthly, we examine how demographic traits that affect voters’ choice of candidates are distributed across gender in the actual pool of candidates.

Supply-side explanations: Candidate emergence

Turning to supply-side explanations, a variety of factors may contribute to the disparities in political engagement. In the following, we first outline a simple model on when candidates can be expected to run for political office before reviewing the literature on female candidate emergence.

When should we expect candidates to run for office?

A person’s decision to run for office is a multifaceted decision, where many factors go into the consideration. Suppose that a potential candidate will run for office if he/she estimates that the benefits are higher than the costs. The costs can be defined as time and money. A person is therefore less likely to run, when the time demand increases or the financial costs of running are higher. Furthermore, the decision is guided by intrinsic and extrinsic motivation. Intrinsic motivation relates to the person’s internal motives for running such as the excitement of being a political candidate or a wish to change the world, while extrinsic motivation relates to external incentives such as money or fame. Finally, the chance of being elected is important for the

⁵Specifically, Teele, Kalla, and Rosenbluth (2018) find that voters’ prefer married candidates with children which require female politicians to work longer hours due to the uneven gender distribution of household labor.

decision to run. The chance of being elected is assumed to be subjective and determined by a belief in your own competencies.

Gendered differences in candidate emergence

A number of factors are likely to affect potential candidates' perceptions of costs and benefits of pursuing a political career. Previous literature suggests various reasons as to why a political career may seem more promising to men than it does to women (Fox and Lawless 2010, 2011; Shames 2017; Fox and Lawless 2004). Specifically, we outline four mechanisms that previous literature identified as areas that can materialize into differences in emergence.

First, differences in self-assessed *political qualifications* is often identified as an important variable in explaining differences in emergence. Previous literature has suggested that women are more likely than men to doubt that they have skills and traits necessary for electoral politics (Fox and Lawless 2011, 2010). Fox and Lawless (2010) talks about a 'gendered psyche' as '*a deeply embedded imprint that propels men into politics but relegates women to the electoral arena's periphery*'. In a sample of well-educated Americans, the authors measure specific components of self-assessed qualifications to enter politics such as being a good speaker, a good fundraiser, be knowledgeable about politics etc. Regarding all measures, women are less likely to say they possess the skill compared to men. In the same vein, building on a survey that was fielded among Americans well-positioned for a career in politics, Fox and Lawless (2011) suggest that whereas men are taught to be 'confident, assertive, and self-promoting' the attitudes toward women as political leaders continue to leave an imprint suggesting to women that it is often undesirable to possess these characteristics. Ultimately, this implies that, over time, men develop a greater sense of efficacy as candidates.

Secondly, a body of literature indicates that potential political candidates are more likely to enter electoral contests if they perceive their chances of winning as good (Jacobson and Carson 2015; Stone and Maisel 2003). Indeed, this proposition is central to the literature on strategic politicians and political ambition. If perceived prospects of winning differ across gender, it might be an additional source to gender disparities in candidate emergence. We therefore consider *perceived chances of being elected* as a factor that underpins gender differences in emergence.

A third aspect that is often considered is *political interest*, which serve as an important factor in candidates' intrinsic motivation to run. Declared interest and knowledge about politics has

been found to be significantly lower for women than for men (Fraile and Gomez 2017; Inglehart and Norris 2003; Coffé and Bolzendahl 2010; Dassonneville and McAllister 2018). There are various explanations for this. Some research argue that it is due to socialization (Alwin, Cohen, and Newcomb 1991; Lovenduski 2005), due to division of labour (Frazer and Macdonald 2003), or that material and socioeconomic resources differ, which ultimately spurs different interest (Burns, Schlozman, and Verba 2001).⁶

A fourth difference that may prevent women from running for office is *time constraints*. Previous literature has suggested that this can be due to disproportionate household responsibilities (Campbell and Childs 2014), different priorities regarding work-life balance, and gendered family structures, where women spend more time on household childcare and family obligations (Silbermann et al. 2015; Fox and Lawless 2010).⁷ Thus, time constraints may on average impose bigger costs to female candidates.

As a first step in examining supply-side explanations, we seek to examine differences in emergence among potential candidates. In order to do so, we ask respondents to imagine that their favorite party encouraged them to run for a seat in the local council and rate how likely they would be to accept the offer. As a second step we are interested in exploring if the four mechanisms described above can explain potential gender differences in willingness to run for office.

⁶It is worth mentioning that some studies find a relative decrease in the gender gap in political interest due to higher levels of gender equality (Deth 2000) or modernization and secularization (Inglehart and Norris 2003).

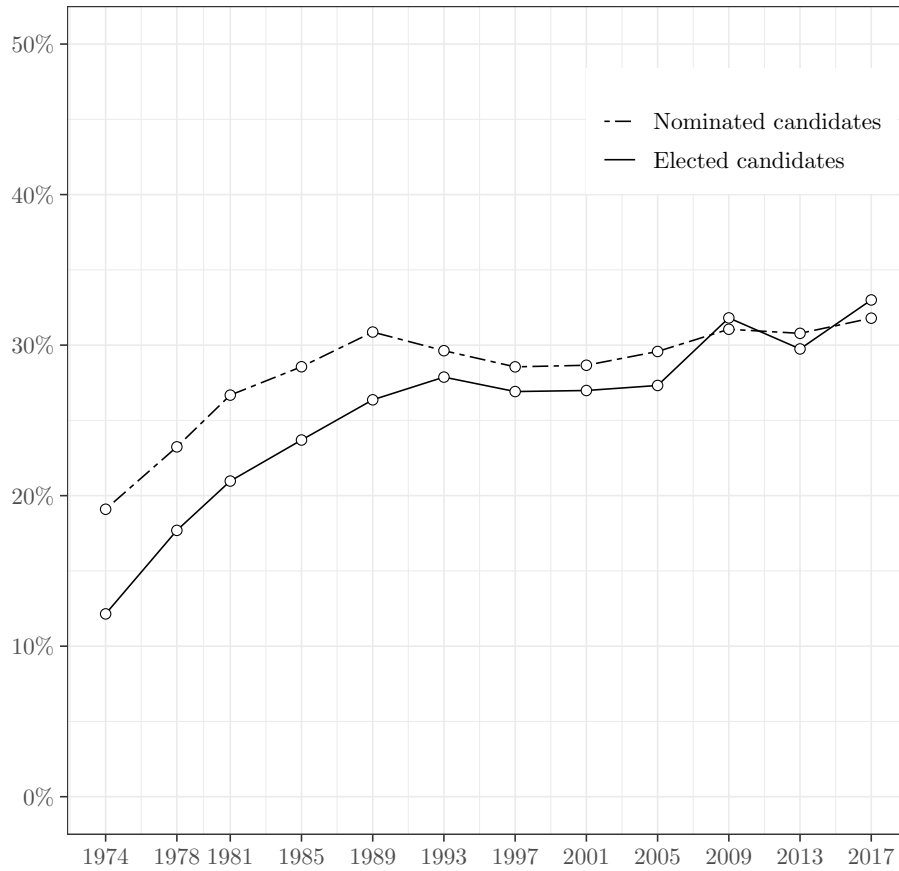
⁷Note that although some of the differences mentioned above are only perceived – self-assessed qualifications may not reflect actual qualifications – they can still impact candidates’ decision on whether or not to run. For example, although the chances of winning a seat or personal qualifications are the same for men and women, it is enough that perceived qualifications or chances differ.

The context: Gender representation in Danish municipal politics

Denmark is characterized by a large degree of decentralization. The municipalities are responsible for around 50 % of the total government expenditure, which is the highest in Europe (Eurostat 2017). This budget is spent on a long range of public services such as schools, local infrastructure and social benefits. Furthermore, the local city councils enjoy a large degree of financial and political autonomy. Local politics is therefore hugely important in Denmark and, as a result, local elections are heavily contested and enjoys much attention from parties, the media and voters. Turnout has consistently been high; in the local election in 2017, the national turnout was 70.6 %. Women were a little more likely to vote (72.4 %) than men (68.8 %) (Hansen 2017).

There are 98 municipalities in Denmark, which ranges from around 2.000 inhabitants to more than 600.000. Each municipality has an elected city council. The smallest consists of 9 persons (Læsø), while the largest consists of 55 persons (Copenhagen). The members of the city councils are up for re-election every four years. The election system is proportional, and everyone can – as long as they have a limited number of signatures - run for election. Apart from the far left party *the Unity List* the established parties uses open lists in most municipalities. The candidates with the most personal votes within the party therefore take the mandates nominated to the party. The barriers to running are low, and in the latest election around 1 in 400 voters were running for a seat in the city council. The elected members of the city council enjoys a size-able salary, which varies depending on the responsibilities of the politician. Some politicians, such as the mayor, are full-time politicians, while the bulk of the politicians remains part-time politicians. In addition to the salary, there is an extra remuneration if the politician has children living at home.

Figure 1: Share of women in Danish Municipal Politics



Source: Statistisk Aarbog

In 2017, 9,558 candidates were competing for 2,432 seats in the city councils. 31.8 % of the candidates were women, while 33.0 % of the elected members of the city council were women. This indicates that among the pool of candidates, women were slightly more likely to be elected given they were running as a candidate. This is supported by the actual distribution of votes. The median female candidate received 92 votes, while the median male candidate received 78 votes, and furthermore the median female candidate received more votes than the median male candidate across all major parties. If we instead look at the average, the average male candidate received 257 personal votes, while a female candidate received 233 votes. This number is, however, skewed due to an overweight of high-profile male candidates, who run as mayors in the largest cities and therefore receive a large number of personal votes. When mayors are removed from the sample a female candidate on average received 207 votes in the election

in 2017, while a male candidate received 190 votes on average. As seen in figure 1, it has not always been the case that women were more likely to be elected. In 1974, a male candidate was almost 60 % more likely to be elected than a female candidate. The share of female candidates running for office increased drastically in the 1970'ies and 80'ies, but stagnated in 1989 and has essentially remained constant ever since (Kjær 2013). The increase in the share of women in local councils since 1989 can therefore primarily be attributed to the fact that women are more likely to be elected than previously. It is important to note that even though the descriptive results indicate that women are no less likely to be elected than men in recent elections, this does not entail that women do not face an electoral disadvantage due to bias among voters. For example, it may be that women that run for office are more qualified than men or that women face a disadvantage among certain groups of voters. In addition, it may be that there is less demand for female politicians from the voters, and that parties therefore strategically decide not to field female candidates. Likewise, potential female candidates may chose not to run if there is a systematic bias against them on behalf of the voters. Thus, an disproportionate supply may be a response to demand preferences. We therefore rely on experimental data to look at whether male candidates are preferred to female candidates.

Design and data

The main data source for the analysis is a survey of representative voters. In addition to the survey, we use additional observational data, which is obtained from Statistics Denmark and the national broadcasting company, Danmarks Radio. This section will concern the survey. At the beginning of the survey, respondents were asked questions on demographics and vote choice, and they were asked to place themselves on a political left-right scale (0-10). Respondents were then exposed to the candidate choice conjoint experiment. The experiment was presented to respondents in the first part of the survey to avoid priming respondents to think about representation.⁸ In the last part of the survey, respondents were asked the questions that we use to evaluate supply-side explanations. The following sections outline the experiment and the survey in detail.

⁸The online appendix contains complete details about the survey protocol.

The sample

The survey was conducted in a commercial web panel (AnalyseDanmark), where panel members were invited by email to participate. A total of 2,123 respondents started the survey, and 1,551 completed the entire survey, which corresponds to a completion rate of 73 %. The sample is approximately representative of the adult Danish population on gender and age⁹, while the educational level in the sample was somewhat lower compared to the general population. Respondents' self-placement on a political left-right scale indicated a decent spread of ideological variation (Mean = 4.8, SD=2.4, scale 0-10). For a comparison of sample and population characteristics, see appendix 7). Male and female respondents are well-matched in age, geography and likelihood to vote at recent elections. They differ, however, somewhat in which parties they voted for, with women being more left-wing than men (as is the case among the full voter population). The survey did not gauge respondents' objective credentials.

The sample serve as voters in the conjoint experiment and potential political candidates in the study of supply-side factors. Since we are interested in examining reasons to the initial decision about whether or not to engage in local politics, the population of interest is all potential candidates, i.e. a representative sample of Danish voters. This sample is especially viable in local politics because access is easy – candidates can often engage without a long history of party-membership, they can create their own party or run as non-party member – and a considerable amount of Danish citizens actually run at some point. Most prior research on gender-differences in candidate emergence consider respondents, who have already entered politics as members of parliament (Campbell and Childs 2014) or in samples of voters who are well-positioned to serve as future candidates (Fox and Lawless 2011, 2010). Other studies ask informants (party leaders, convention delegates, activists etc.) to name viable candidates that are then surveyed (Stone and Maisel 2003). In other words, most previous work on emergence has examined differences among groups that have already selected into politics or are in the periphery of a political domain. While this research is both important and provides vital information about emergence, it also holds some constraints due to issues with selection (Lawless and Fox 2004; Fox and Lawless 2004; Bækgaard and Kjær 2012). The gender-gap can be rooted in initial differences before any engagement in politics which we might miss if we ask

⁹Age in years in the sample $M = 53$, $SD = 16.6$ ctr. population $M = 49.1$, $SD = 18$. The share of female: sample = 49.7 % ctr. population = 50.8 %

after self-selection into politics. Drawing on a sample of all potential candidates adds to our understanding of why people decide to stay out of or select into politics at the initial stage.

Candidate choice conjoint experiment

The candidate choice conjoint experiment allows us to evaluate the impact of a large set of factors on respondents' preferences over political candidates. We use a paired-conjoint in which respondents are asked to choose their preferred candidate among two hypothetical political candidates described on seven attributes that could each hold two or more levels. Compared to a single-attribute survey experiment, our conjoint experiment resembles a more realistic scenario in which voters are able to consider candidates that differ on a variety of dimensions, which accordingly increases the external validity (Hainmueller, Hopkins, and Yamamoto 2014). Each respondent was presented with five pairs of side-by-side profiles of randomly generated candidates (see Appendix 1 for an illustration of these profiles) and a forced-choice between the two candidates. By asking each respondent to evaluate several pairs of candidates, we increase the effective sample size of the survey (7755 choices in total). The experiment was implemented using Qualtrics software.

The following candidate features were randomly assigned: name, age, profession, political experience and position on two policy questions and party affiliation (pairwise). The names that were used represent four different categories across gender (male/female) and ethnic affiliation (majority/minority). Contrary to most conjoint experiments, we use names as proxies for gender and ethnic affiliation, since providing information about ethnicity is uncommon in a Danish context. Arguably, this serve to maximize realism and circumvent that respondents anticipate the two features 'gender' and 'ethnicity' as being specifically important, which could result in response bias. By the same logic, we restricted the probability of any given candidate having an ethnic minority name to 20 %. We rely on a range of highly popular names that are easy distinguishable to provide precise signals for ethnicity and gender.¹⁰

In order to avoid that respondents choose candidates based on inferences about the connection between gender and party-affiliation – implying that party effects would confound potential gender effects – we included partisanship as a feature (as is also the case on the voting ballots).

¹⁰We included a variety of the most popular traditional Danish-sounding names and the most popular Middle Eastern-sounding names used in Denmark. In total, 32 names were used

However, to avoid that partisanship mute effects of other traits, we held the candidates' party label constant in each pair, i.e. both candidates were affiliated with either the Liberal Party or the Social Democrats.¹¹ This also simulates the open list system, where the elected candidates are those within the party, who receive the most votes. We also provided candidates' position on two policy questions to mitigate that voters infer policy positions from gender. We relied on an economic question '*Should local taxes be reduced?*' and a question on social policy '*Should municipalities secure diversity in schools?*'. The questions were adopted from the "Candidate Test", a popular online questionnaire of 15 policy questions developed by Altinget and the national broadcasting company, Danmarks Radio, that local politicians answer before the election, making it possible for voters to match their answers with all political candidates.¹² We only included two policy questions in the conjoint to avoid the cognitive burden of overloading respondents with information.

Because the effects of each feature is measured on the same outcome, their relative importance can be evaluated. We estimate Average Marginal Effect Components (AMCE) by using linear regression. For example, we estimate the average difference in the probability of a candidate winning if he is male compared to female when the average for all other possible combinations of the other attributes is computed. This is estimated by regressing an indicator for whether the respondent chooses a candidate on the specifications of the various characteristics mentioned above. To correct for the within-respondent clustering, we cluster standard errors by respondent as is common in the literature (Hainmueller, Hopkins, and Yamamoto 2014).

Measuring reasons to run

We measure whether people are interested in running as candidate by asking them the following question "*Imagine that your preferred party encourage you to run as a candidate at the next local election. How likely is it that you would accept the offer?*". The respondents can then answer the question from a scale from 0 (Very unlikely) to 10 (Very likely). This type of question is not unique to this study, and a similar question has been used in the Danish case before (Kjær and Kosiara-Pedersen 2018; Kosiara-Pedersen and Hansen 2013). In the last part

¹¹Party-affiliation has proven to be the single most important information that voters pay attention to (Green, Palmquist, and Schickler 2002).

¹²Although some combinations of party affiliation and policy position are rare, all combinations are present in the actual pool of candidates.

of the survey, respondents were asked the questions that we use to evaluate reasons to run for office. These questions are based on the theoretical reasons for why a person would run as a candidate, which we put forward above. We relied on four statements and asked participants to indicate whether they agreed with the statement on a 5-point likert-scale, where 5 is "Agree strongly" and 1 is "Disagree strongly". The four statements are: (1) *I am interested in local politics*; (2) *I am qualified to participate in local politics*; (3) *I have the time to engage in local politics* and finally (4) *If I ran as a candidate for the city council, I would be elected*.

Analysis

Is there less demand for female politicians?

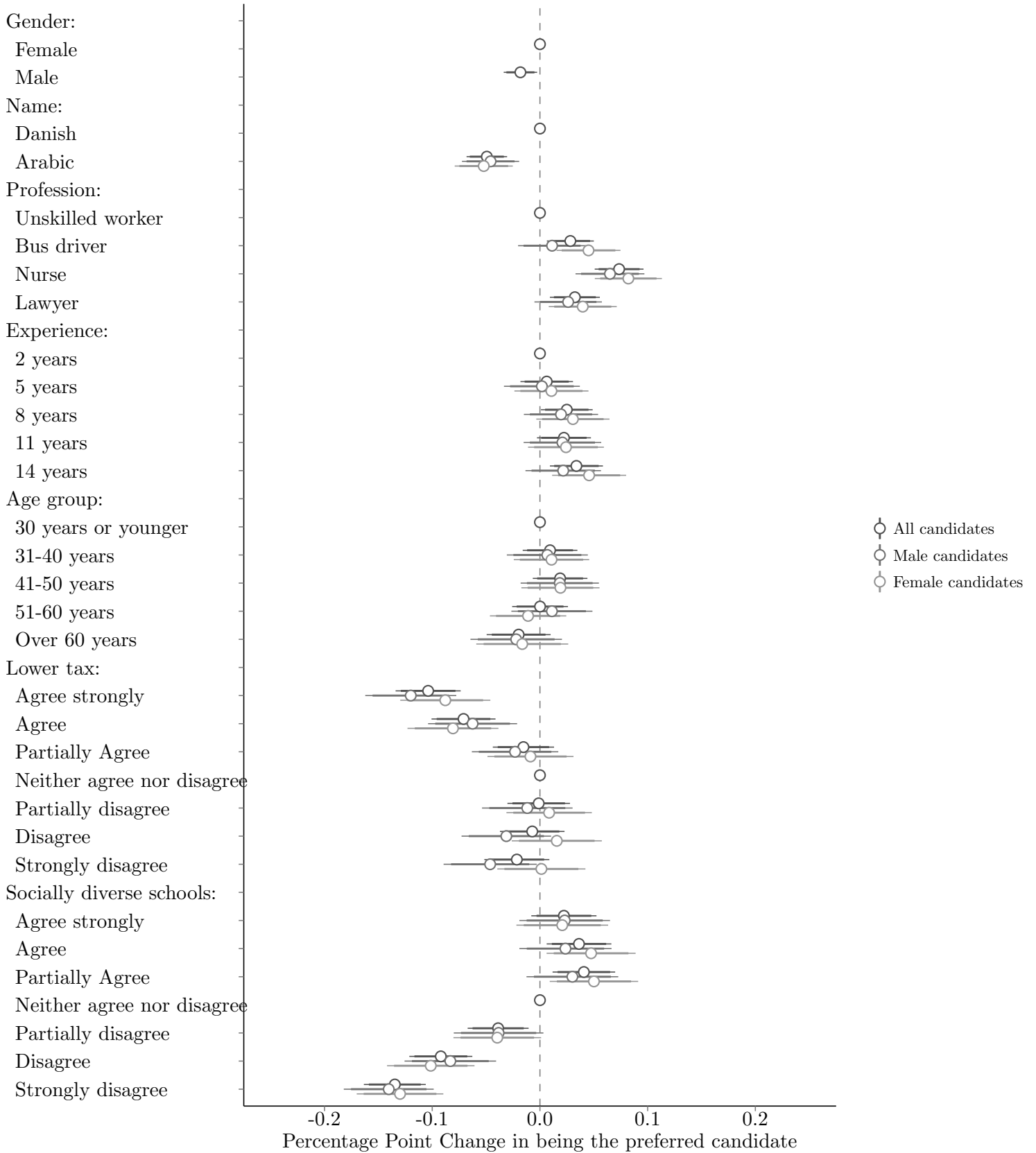
Are female candidates less preferred by the Danish voters? Figure 2 gives the results from the conjoint experiment. Here, the AMCE of each feature level and the 95 % and 90 % confidence intervals are shown. In other words, each estimate is the difference in the likelihood of being preferred as candidate compared to one omitted feature level (the reference category) when averaging over all other features. The results for all candidates are shown in the first row and render little support for the notion that voters exhibit a bias against female candidates. In fact, voters seem to have a small preference for female candidates over male candidates by 1.8 percentage points. The figure also shows a number of other interesting results. For example, it is seen that candidates with Arabic names are less preferred, while candidates with political experience are favoured by the voters. However, unsurprisingly the effect sizes are biggest on the policy questions, where voters on average have a negative view of candidates, who want to lower the taxes and are against socially diverse schools.

Even though voters do not hold a bias against female candidates overall, it may be that female candidates are judged differently by the voters than male candidates. As a result, they may be punished or rewarded for different attributes than men, which could put women at a disadvantage at the ballot box. We therefore repeat the analysis for male and female candidates separately in the second and third row of Figure 2. Here, it is seen that the results in general are very similar for male and female candidates. Nonetheless, there are small, but insignificant differences. Female candidates are rewarded more for having a skilled job and for having more experience in local politics relative to men. Most interestingly, women are punished less for

having extreme views in either directions on whether taxes should be lowered. The pattern is less clear for the question on socially diverse schools. This could either indicate that voters are more tolerant towards female candidates with extreme views than male candidates or that female candidate's views on tax policies are less important to voters when they make their decision. This fluctuate well with the research on gender stereotypes, which has shown that male politicians are considered to be more competent on "hard" policy questions than female politicians (Huddy and Terkildsen 1993).

The table in Appendix 2 shows the actual distribution of the traits used in the conjoint experiments for real world candidates. We can see that the female candidates in general fit the voters' preferences better than the male candidates. They are less likely to have an Arabic name, are better educated, less likely to be over 60 years of age and have preferences on the tax and social diversity question, which align more with the policy preferences of the respondents in our survey. For example, a larger share of female candidates disagree strongly with lowering the taxes (46.1 %) than male candidates (34.7 %). However, female candidates are less likely to have been elected in the last election compared to male candidates (16.9 % v. 20.5 %). This mean that female candidates may be more likely to face an incumbency disadvantage (Dahlgaard 2016).

Figure 2: Conjoint experiment: Effect of candidate attributes.



Effect heterogeneity across voter groups

Overall, the results indicate that Danish voters broadly favor female candidates in local elections. However, this does not entail that female candidates do not face a disadvantage among certain types of influential voters. For example, it may be the case that voters in small municipalities, where fewer votes are required to make it into office, have a stronger preference for male candidates than voters in large municipalities, or it may be that voters with specific political viewpoints systematically vote against female candidates. Moreover, we expect some degree of homophily, namely that male voters prefer male candidates over female candidates and vice versa (Sanbonmatsu 2002; Dolan 2008). We therefore test for effect heterogeneity in Figure 9.

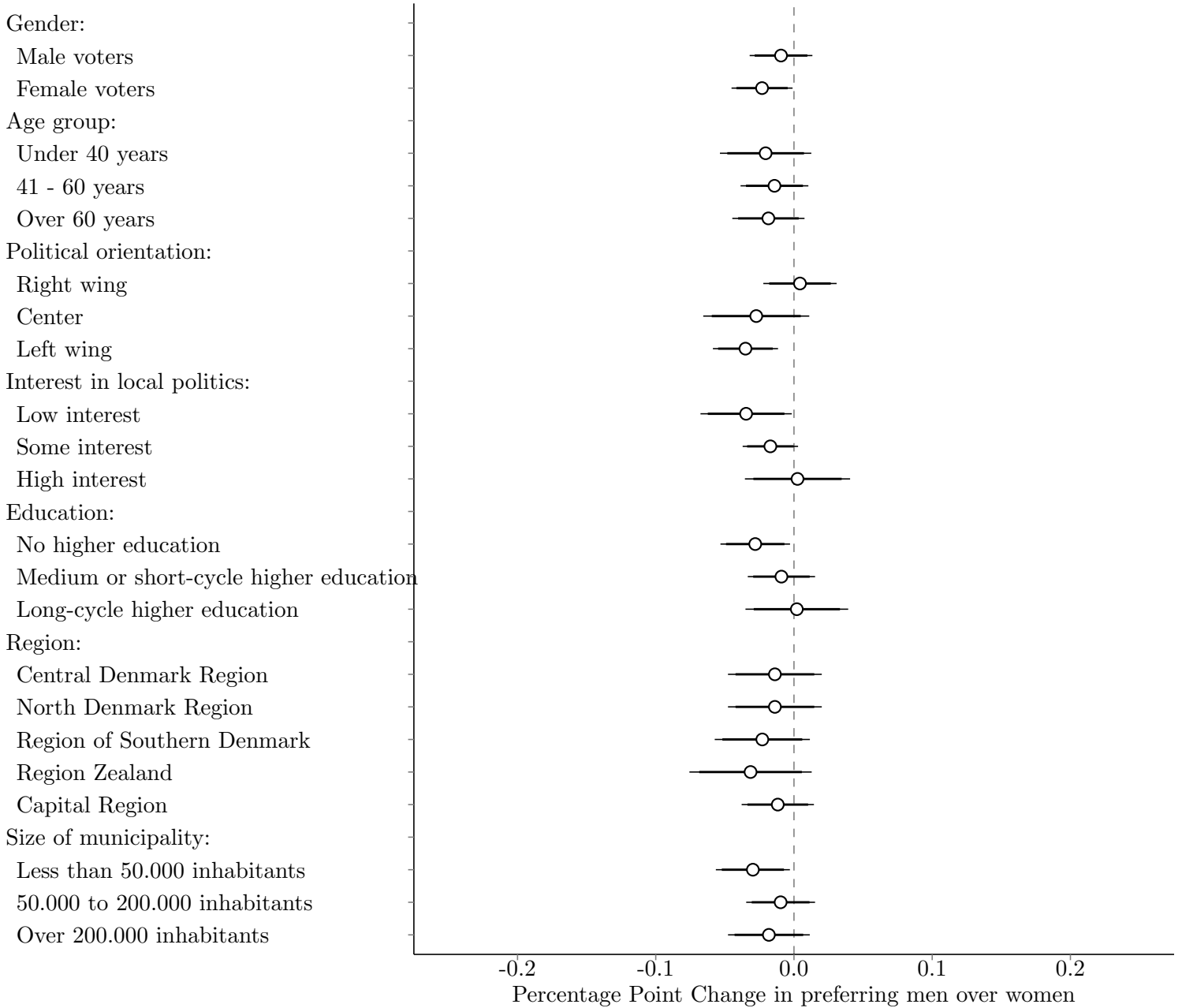
The experiment shows that female candidates are preferred by both male and female voters, although the difference is only significant for female voters. Likewise, all age groups prefer female candidates in the conjoint experiment. If we look across the political spectrum, it is seen that left-wing voters have a strong preference for female candidates, while right-wing voters are indifferent to the gender of the candidate. This is reflected in actual composition of female and male candidate, where left-wing parties have a higher share of elected female candidates than parties on the right. Furthermore, it is seen that voters, who have little interest in local politics, have a stronger preference for female candidates than voters, who are very interested. As seen in an appendix, this is true for both genders. Due to their low interest in local politics, it is expected that these voters rely on less information when they make their decision about whom to vote for. This mean that they may make decisions based on information, which can be acquired at a low-cost such as the gender of the candidate (Cutler 2002; Palfrey and Poole 1987; McDermott 1997; Banducci et al. 2008). These voters may therefore be especially likely to pick a candidate solely because of the candidate's gender. Likewise, we see that voters with a low educational achievement are those, who are most supportive of female candidates. Again, as seen in the appendix, this apply to both genders.

If we instead turn towards geographic patterns, we see that female candidates are preferred across all regions and in both small and large municipalities. In fact, voters in less populous municipalities are those, who favor female candidates the most. These voters have a disproportionate impact on the overall gender balance. In the smallest municipality, Læsø, there are 143

votes per member of the city council, while there are 5,554 votes per member of the city council in Copenhagen. The data renders little support for the thesis that specific types of influential voters have a strong preference for female candidates, which would put female candidates at a disadvantage in the election booth. Across all demographic groups, we can only find two groups, who indicate that they on average prefer male candidates by more than 2 percentage points, namely right-wing women and highly-educated men. This is seen in Appendix 6.3.

In sum, there is little evidence, which support the demand-side explanation. Danish voters overall have a preference for female candidates, and female candidates seem to have characteristics, which align better with the preferences of the voters. In addition, female candidates are preferred among almost all subgroups of voters, and especially those who are important for the overall electoral results. We do, however, find one result, which may put female candidates at a disadvantage. Namely, that they to a higher degree face an incumbency disadvantage. Nonetheless, in light of the remaining evidence, it is hard to believe that this account for the relatively large under-representation of women in Danish local politics.

Figure 3: Conjoint experiment: Effects of being male for different types of voters



The figure indicates how much less (or more) a male candidate is preferred to a female candidate across different types of voters. If the dot is to the left of the baseline a female candidate is preferred and vice versa. On a scale from 1 to 5, a voter, who answered 1 or 2 is coded as having "low interest", 3 or 4 as having "some interest" and 5 as having "high interest".

Are women less likely to want to run for office?

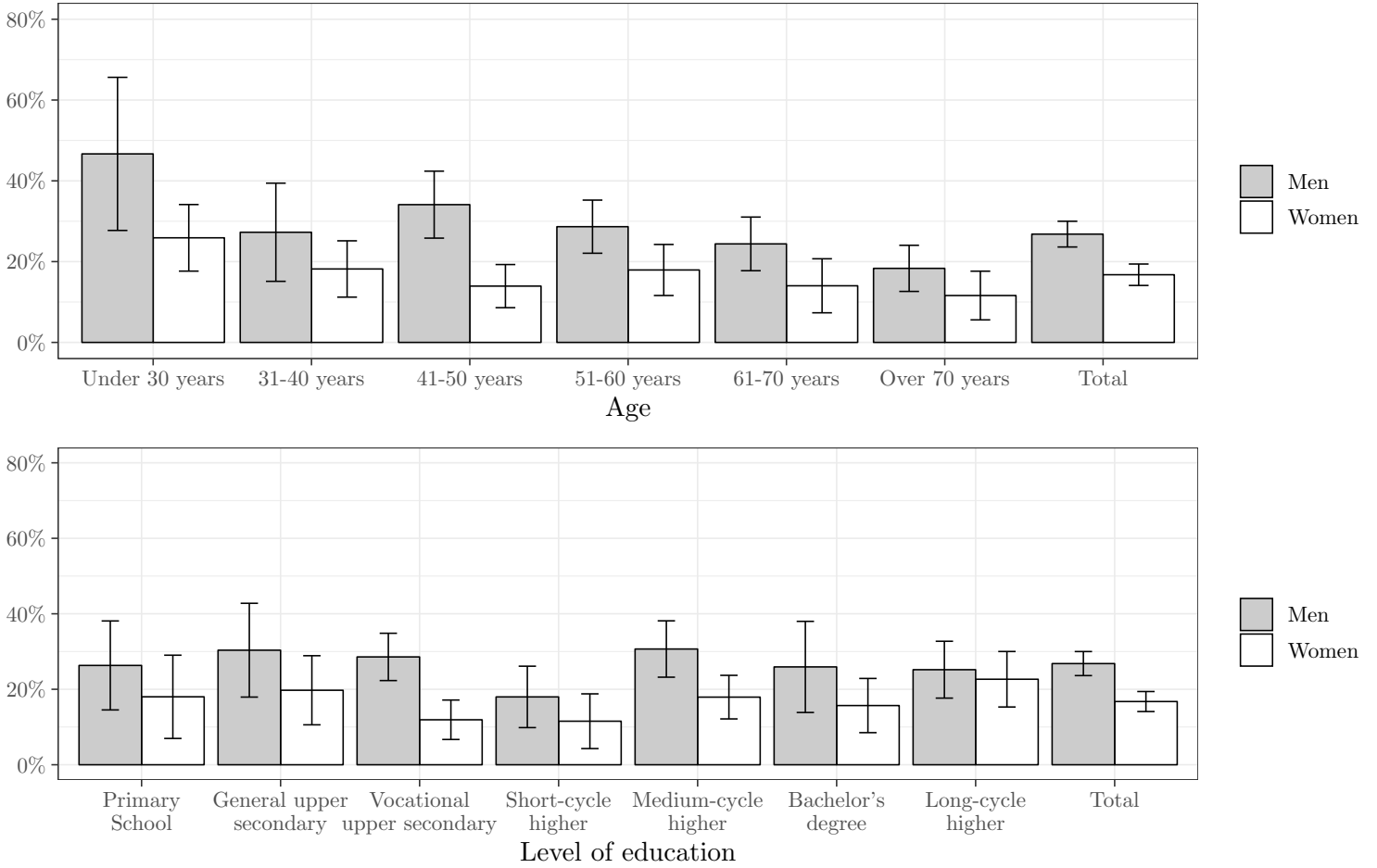
The results indicate that demand-side explanations are insufficient to explain the gender imbalance in local Danish politics, and we therefore turn toward supply-side explanations. First, we examine differences in how likely respondents are to run as a candidate if they were encouraged to run by their preferred party. In the analyses below, a person is defined as being likely to run if they answer 5 or more on a scale from 0 (Very unlikely to run) to 10 (Very likely to run). The substantive results remains similar if we use another cut-off point as seen in appendix 5.

We find large overall differences across genders. 27 % of the male respondents reported that they were likely to run, while 17 % of female respondents indicate that they were likely to run if encouraged to do so.¹³ In a representative sample of Danes, women therefore indicate that they are significantly less likely to run for a local election than men.¹⁴ Again, it should be noted that there are low barriers to entry and that around 1 out of 400 voters run for office at any given election. This finding mirrors a recent finding by Kjær and Kosiara-Pedersen (2018), who find that female party-members in Denmark are less likely to be interested in running for national office than male party-members. In Figure 4, the percentage of people likely to run are shown by age group and education. Although there are large overall differences across age and education, men indicate that they are more likely to run across all categories, even though the difference is not significant for all categories. There are interesting patterns. For example, young people of both genders indicate that they are most keen to run. Furthermore, it is seen that there is little fluctuation in the likelihood of men running across educational levels, while highly educated women are most likely to run.

¹³Women on average place themselves at 1.8 on a scale from 0-10, while men place themselves at 2.7. If we instead set the cut-off at 9 or above, so these answering 9 or 10 are coded as likely, 7 % of men would be above the threshold, while 3 % of women would be above the threshold.

¹⁴If we use these number to calculate the expected number of candidates of each gender, 61 % of the candidates would be men, while 39 % would be women.

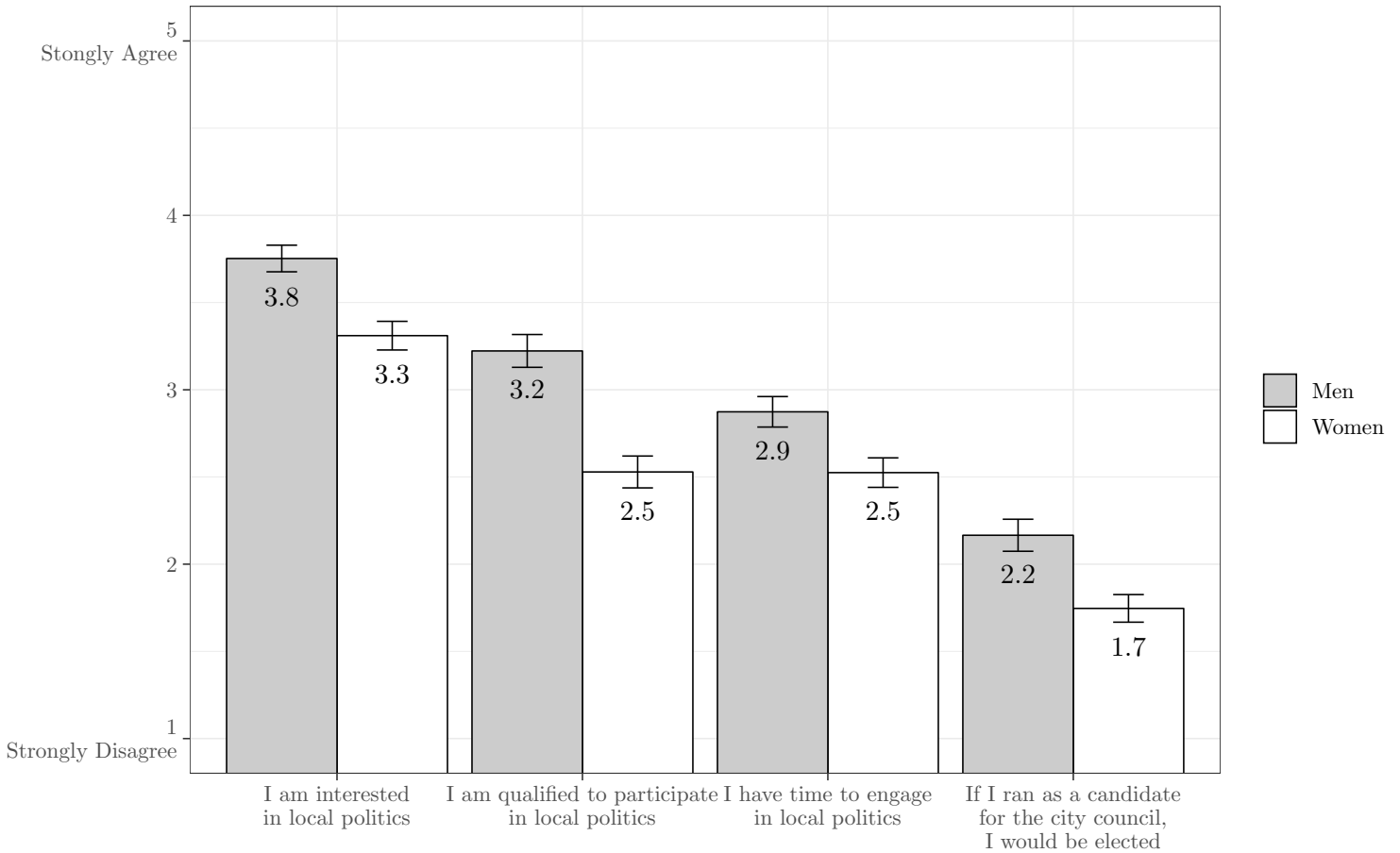
Figure 4: Share who say they are likely to run as a candidate if they are encouraged to run by their preferred party



Note: A person is defined as being likely to run if they answer 5 or more on a scale from 0 (Very unlikely) to 10 (Very likely). N = 1.510. 746 men and 764 women.

As discussed in the theoretical part of the paper, there can be a number of possible reasons for why we see these differences across genders. Figure 5 gives results for the four mechanisms that we examine. On average, men score themselves significantly higher on all four dimensions. First, we look at self-perceived qualifications which, according to Fox and Lawless (2011), is the "most potent" explanation for willingness to run for political office. On this question, there is a difference on 0.7 – a substantial difference considering the 5-point scale. Additionally, men are more interested in local politics (.5) compared to women, who also are more reluctant to answer that they have the time to engage in local politics (.4). Finally, men are more confident (0.5) that they will be elected should they decide to run for office.

Figure 5: To which degree do you agree with the following statement?



N = 1.551. 762 men and 789 women.

In order to test, whether these factors are related to a person’s likelihood of running, we run a regression analysis in Table 1. In model 1, we see that women are significantly less likely to run. This is not a surprise given the results from above. In the following models, the variables from Figure 5 are added. Individually, all four variables are positive and significantly associated with likelihood of running. Since they are measured on the same scale, they are directly comparable. It is seen that the association is strongest for *feeling qualified* and *belief in being elected*, while it is weaker for *time* and *interest*. Furthermore, it is seen that the association between female and likelihood of running for office disappears when *feeling qualified* is added to the regression, while it is only weakened by the three other variables. In model 6, the four questions are added collectively, and it is seen that there is no significant association between being female

and likelihood of running for office, when these factors are taken into account. Again, *feeling qualified* and *belief in being elected* correlates strongest with the likelihood of running, while the relationship between time and interest and likelihood of running disappears. In model 7, we include a range of background variables and in model 8 we include variables concerning political beliefs and party-membership. Among other things, it is seen that older people are less likely to being interested in running for office, while people, who either lean left or right are more interested in running than people at the center. The inclusion of these extra variables does not alter the substantive relationship between our main variables. Although the chain of causation is unclear, the results indicate that self-perceived qualifications and confidence in being elected are important for understanding both the the overall likelihood of a respondent being interested in running for office – and in explaining the gender gap on this question.

The findings from the regression analysis are supported by the self-reported reasons provided by the respondents. We asked all respondents to give a supplementary qualitative comment to the question on whether they would consider running as a candidate. The respondents could therefore provide whatever explanation they felt was relevant. Among those, who said they were not likely to run, 928 provided a reason for their answer.¹⁵ Of these 511 were women, while 417 were men. Women were much more likely to answer that they were not qualified to run for non-physical reasons (25 %) than men (13 %), while men more often argued that they were not running due to physical reasons such as old age or bad health (27 % for men and 16 % for women). The remaining reasons are seen in Figure 6.¹⁶ This points towards a clear pattern in the answers across genders. Women more often argue that they do not feel confident running as a candidate and give explanations such as "I have no experience with politics, and I would be bad at debating" and "Other people would be way more qualified than me". Men, on the other hand, rarely argue that they do not have the competencies. Instead, a typical argument is "This is not where I want to spend my time" or "I am working as a lawyer and do not want to display my political beliefs". Men therefore tend to believe that they would be capable of doing the job, but that their energy would be better spend elsewhere or that it will be bad for

¹⁵Again, we define people as not likely to run if they answered less than 5 on a scale from 0-10.

¹⁶The qualitative answers were coded by two coders. Inter-coder reliability was high with a Fleiss's kappa = .97 (where 1 equals perfect agreement).

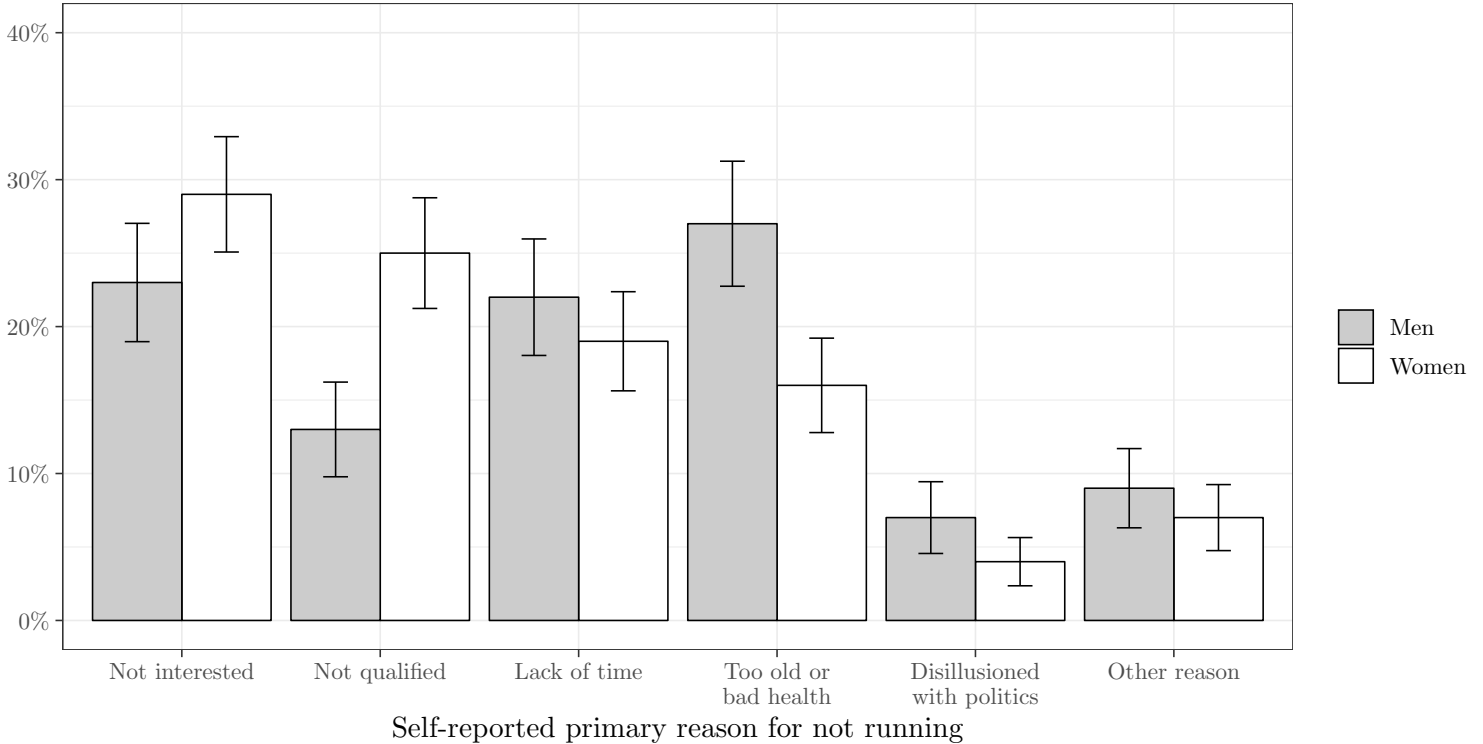
their career. In both the qualitative and the quantitative, the main difference between women and men is that women systematically judge themselves lower on measures of self-efficacy. This is related to a significantly lower willingness to run. Overall, we therefore find that this is likely to be the key driver of under-representation of women in Danish local politics.

Table 1: Association between personal traits and a person saying it is likely they would run if encouraged to run

	<i>Dependent variable:</i>							
	Likelihood of a person being interested in running							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Male (ref)	-	-	-	-	-	-	-	-
Female	-0.57*	-0.38*	-0.45*	-0.08	-0.28	-0.05	-0.17	-0.22
	(0.14)	(0.14)	(0.14)	(0.15)	(0.15)	(0.16)	(0.17)	(0.18)
I am interested in politics		0.53*				0.09	0.19*	0.20
		(0.08)				(0.09)	(0.10)	(0.10)
I have time to engage in local politics			0.44*			0.08	0.12	0.15
			(0.06)			(0.08)	(0.08)	(0.08)
I am qualified to participate in politics				0.77*		0.47*	0.44*	0.40*
				(0.07)		(0.08)	(0.09)	(0.09)
If I ran as a candidate I would be elected					0.78*	0.48*	0.48*	0.52*
					(0.07)	(0.08)	(0.08)	(0.08)
Primary school (ref)							-	-
General upper secondary education							-0.41	-0.75
							(0.40)	(0.42)
Vocational upper secondary education							-0.06	-0.40
							(0.34)	(0.36)
Short-cycle higher education							-0.26	-0.48
							(0.39)	(0.40)
Medium-cycle higher education							-0.01	-0.25
							(0.34)	(0.35)
Bachelors degree							-0.82*	-1.10*
							(0.40)	(0.42)
Long cycle higher education							-0.51	-0.83*
							(0.35)	(0.37)
Age							-0.03*	-0.03*
							(0.01)	(0.01)
Capital Region (ref)							-	-
Central Denmark Region							0.05	0.09
							(0.22)	(0.23)
North Denmark Region							0.03	-0.08
							(0.29)	(0.31)
Region Zealand							0.28	0.31
							(0.25)	(0.26)
Region of Southern Denmark							0.25	0.25
							(0.22)	(0.23)
Party member (ref)							-	-
Not a party member								0.08
								(0.24)
Left-Right Scale								-0.31*
								(0.12)
Left-Right Scale, squared								0.03*
								(0.01)
Constant	-0.96*	-3.01*	-2.28*	-3.66*	-2.82*	-4.36*	-3.13*	-2.40*
	(0.09)	(0.32)	(0.21)	(0.27)	(0.19)	(0.36)	(0.52)	(0.68)
Observations	1,216	1,216	1,216	1,216	1,216	1,216	1,201	1,113
Log Likelihood	-641.50	-613.23	-613.32	-557.20	-562.24	-534.07	-514.14	-479.62

Note: Analysis based on logistic regression. Dependent variable is "Likely to run". Only respondents, who have answered have answered the questions to all four statements are included. *p<0.05.

Figure 6: Respondents self-reported reason for not wanting to run as a candidate for the local city council



A respondent is classified as being not willing to run if they answer 4 or less on a scale from 0 (Very unlikely to run) to 10 (Very likely to run). N = 928. 417 men and 511 women.

Discussion and conclusion

This paper examines the reasons for the gender gap in politics by focusing on both demand-side and supply-side explanations in the context of local Danish politics. In the city councils, only a third of of all elected politicians are women. The low representation of women is puzzling since these elections can be considered a least likely case for the under-representation of women.

Overall, we find little support for any demand-side explanation. On the other hand, the evidence shows that critical gender differences exist at the candidate emergence phase. A candidate conjoint experiment shows that Danish voters in general have a slight preference for female candidates in local elections. Moreover, we find that male and female candidates with identical traits are evaluated almost similarly. Furthermore, it seems to be the case that female candidates in the actual pool of candidates have traits that align more closely

with the preferences of the voters in our study. We also find that the preference for female candidates is consistent across various respondent characteristics. When considering supply-side explanations, we find that female voters are far less likely than men to consider running for office, and therefore emerge in the pool of potential candidates. Where previous literature has found similar results in samples of candidates that are already politically active or well-positioned for a political career, we show that these differences also exist at an early stage in the political process in a sample of all potential candidates. Thus, even though women who run for office are just as likely as men to get elected, the candidate emergence process results in a smaller ratio of women than men, who run for office. We consider different mechanisms as to why this is so. Although we cannot establish a full causal explanation, we find gendered differences on a number of issues that previous research have elicited as important to emerge. Most importantly, the women in our study are less confident that they are qualified to run for office compared to the men. This variable is strongly associated with whether a person is willing to run or not, and this result is supported by the respondents qualitative answers. Secondary, men express greater belief in their chances of being elected should they run for office, express greater interest in politics and report that they have more time to engage in local politics. These general findings are supported by descriptive data, which indicate that women at the election in 2017 are more likely than men to be elected, but that the share of female candidates are smaller.

It is worth mentioning a number of limitations of our study. First of all, the findings from the conjoint experiment raise several inferential concerns and we may worry that the results reflect methodological limitations rather than actual preferences of voters. In an experimental setting, respondents may often be aware that their responses are being evaluated (Berinsky 2004) and thus, respondents may desire to follow norms and respond in a way that are socially desirable. However, the ability to mitigate social desirability bias is an often-mentioned advantage of conjoint experiments. Due to the large number of features, respondents can defend any number of choices – and the research objective is to some extent masked (Hainmueller, Hopkins, and Yamamoto 2014; Teele, Kalla, and Rosenbluth 2018; Sen 2017). The fact that we find a bias against ethnic minority candidates also indicate, that respondents are not unwilling to give answers that can be deemed "inappropriate".

Another methodological objection is that candidate choice conjoint experiments present

generic descriptions of fictitious candidates rather than profiles of real-world political candidates. In other words, respondents in our conjoint experiment may respond differently to a hypothetical female candidate than they would in the context of real elections. Although conjoint experiments have been shown to mirror real world behavior in the context of naturalization of immigrants (Hainmueller, Hangartner, and Yamamoto 2015), no studies have compared candidate conjoint experiments to real-life behavior.

It is also worth considering how the traits that we included in the candidate conjoint experiment could affect our results. The experiment included information on the hypothetical candidates' position on two policy issues, which to some extent may crowd out potential disadvantages of candidates background characteristics. This information was included to avoid that respondents inferred policy position based on a candidate's gender, a decision that relied on the notion that voters in elections oftentimes have some knowledge on candidates policy position. However, some voters do not have this knowledge and respondents' preferences regarding candidates' gender may look different in an experiment that provides less information. Finally, it is worth noting that we do not look at a comprehensive list of variables in our examination of both demand and supply-side explanations. It is possible to imagine a number of traits that was not included in our conjoint experiment, that works as indirect (dis)advantages for female candidates. By the same vein, regarding the supply-side factors, a number of possible explanations other than those examined in this study may explain differences in emergence. We attempt to disentangle four different mechanisms to emergence that may very well be intertwined. For example, confidence in winning an election is obviously not unrelated to self-assessed quality or time constraints. Moreover, there may be other explanations such as the way socialization through career paths moderate opportunities for women (Conway 2001) or aversion to participating in elections (Kanthak and Woon 2015).

Regardless of these limitations, our study sheds light on ongoing debates both in political science and more broadly in discussions of the implications of representation. First, the difference in willingness to run may to some extent be self-reinforcing. Our results suggest that if a political gate-keeper wants an even amount of female and male candidates, the person would need to ask 60 % more female voters than male voters to fill the slots. Therefore, if a person has limited resources to find potential candidates, it would be efficient to ask men rather than women. Moreover, the lack of women in politics may reinforce ideas that deter women

from running in the first place. There is evidence that high-profile female politicians play a symbolic role in motivating other women to run (Ladam, Harden, and Windett 2018) and that the presence of female politicians increase women’s interest in politics and political knowledge (Wolbrecht and Campbell 2017; Dassonneville and McAllister 2018). Second, if the mechanisms that we point out leads more women than men to opt out of participating in political activities at the initial stage, it yields lower levels of political experience and knowledge, which leads to lower levels of qualifications and confidence creating a negative feedback loop. Ultimately, this implies that qualified candidates are left out of politics.

As long as women are more likely than men to doubt their political qualifications and abilities to win an election, the gender gap in local politics will likely flounder. As seen in appendix 4, data from the latest elections suggests that younger cohorts of politicians are somewhat more even on gender balance than older cohorts, but that the share of female candidates under 30 years of age has dropped. This suggest that we cannot take the issue for granted and anticipate that politics automatically will be gender balanced in the future. The main take away of this study is that we need to focus more on supply-side explanations if we want to understand and overcome the gender imbalance in politics.

References

- Alwin, Duane Francis, Ronald Lee Cohen, and Theodore Mead Newcomb. 1991. *Political attitudes over the life span: The Bennington women after fifty years*. Univ of Wisconsin Press.
- Atkeson, Lonna Rae, and Brian T. Hamel. 2018. “Fit for the Job: Candidate Qualifications and Vote Choice in Low Information Elections”. *Political Behavior*: 1–24.
- Bækgaard, Martin, and Ulrik Kjær. 2012. “The gendered division of labor in assignments to political committees: Discrimination or self-selection in Danish local politics?” *Politics & Gender* 8 (4): 465–482.
- Banducci, Susan A., et al. 2008. “Ballot photographs as cues in low-information elections”. *Political psychology* 29 (6): 903–917.
- Barnes, Tiffany D., Emily Beaulieu, and Gregory W. Saxton. 2018. “Sex and corruption: how sexism shapes voters’ responses to scandal”. *Politics, Groups, and Identities*: 1–19.

- Berinsky, Adam J. 2004. "Can we talk? Self-presentation and the survey response". *Political Psychology* 25 (4): 643–659.
- Bratton, Kathleen A., and Leonard P. Ray. 2002. "Descriptive representation, policy outcomes, and municipal day-care coverage in Norway". *American Journal of Political Science*: 428–437.
- Brown, Clyde, Neil R. Heighberger, and Peter A. Shocket. 1993. "Gender-based differences in perceptions of male and female city council candidates". *Women & Politics* 13 (1): 1–17.
- Burden, Barry C. 2007. *Personal roots of representation*. Princeton University Press.
- Burns, Nancy, Kay Lehman Schlozman, and Sidney Verba. 2001. *The private roots of public action*. Harvard University Press.
- Burrell, Barbara. 2008. "Likeable? effective commander in chief? polling on candidate traits in the "year of the presidential woman"". *PS: Political Science & Politics* 41 (4): 747–752.
- Butler, Daniel M., and Jessica Robinson Preece. 2016. "Recruitment and perceptions of gender bias in party leader support". *Political Research Quarterly* 69 (4): 842–851.
- Campbell, David E., and Christina Wolbrecht. 2006. "See Jane run: Women politicians as role models for adolescents". *The Journal of Politics* 68 (2): 233–247.
- Campbell, Rosie, and Sarah Childs. 2014. "Parents in Parliament: 'Where's Mum?'" *The Political Quarterly* 85 (4): 487–492.
- Campbell, Rosie, Sarah Childs, and Joni Lovenduski. 2010. "Do women need women representatives?" *British Journal of Political Science* 40 (1): 171–194.
- Carnes, Nicholas. 2012. "Does the numerical underrepresentation of the working class in Congress matter?" *Legislative Studies Quarterly* 37 (1): 5–34.
- Carnes, Nicholas, and Noam Lupu. 2016. "Do voters dislike working-class candidates? Voter biases and the descriptive underrepresentation of the working class". *American Political Science Review* 110 (4): 832–844.
- Carroll, Susan J., and Kira Sanbonmatsu. 2013. *More women can run: Gender and pathways to the state legislatures*. Oxford University Press.
- Carroll, Susan J., and Ronnee Schreiber. 1997. "Media coverage of women in the 103rd Congress". *Women, media, and politics*: 131–148.

- Chattopadhyay, Raghavendra, and Esther Duflo. 2004. "Women as policy makers: Evidence from a randomized policy experiment in India". *Econometrica* 72 (5): 1409–1443.
- Coffé, Hilde, and Catherine Bolzendahl. 2010. "Same game, different rules? Gender differences in political participation". *Sex roles* 62 (5-6): 318–333.
- Conway, M. Margaret. 2001. "Women and political participation". *PS: Political Science and Politics* 34 (2): 231–233.
- Cutler, Fred. 2002. "The simplest shortcut of all: Sociodemographic characteristics and electoral choice". *Journal of Politics* 64 (2): 466–490.
- Dahlgaard, Jens Olav. 2016. "You just made it: Individual incumbency advantage under Proportional Representation". *Electoral Studies* 44:319–328.
- Dassonneville, Ruth, and Ian McAllister. 2018. "Gender, Political Knowledge, and Descriptive Representation: The Impact of Long-Term Socialization". *American Journal of Political Science* 62 (2): 249–265.
- Deth, Jan W. van. 2000. "Political interest and apathy: The decline of a gender gap?" *Acta Politica: AP* 35 (2): 247–274.
- Devitt, James. 1999. *Framing gender on the campaign trail: Women's executive leadership and the press*. Women's Leadership Fund Washington, DC.
- Dolan, Kathleen. 2014. "Gender stereotypes, candidate evaluations, and voting for women candidates: what really matters?" *Political Research Quarterly* 67 (1): 96–107.
- . 2008. "Is there a "gender affinity effect" in American politics? Information, affect, and candidate sex in US House elections". *Political Research Quarterly* 61 (1): 79–89.
- . 2010. "The impact of gender stereotyped evaluations on support for women candidates". *Political Behavior* 32 (1): 69–88.
- Eurostat. 2017. *Total general government expenditure*. Data retrieved from Eurostat, <http://ec.europa.eu/eurostat/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=tec00023&language=en>.
- Fiona, MacKay. 2001. "Love and Politics, Women politicians and the Ethics of Care". *Continuum, London*.
- Fox, Richard L., and Jennifer L. Lawless. 2004. "Entering the arena? Gender and the decision to run for office". *American Journal of Political Science* 48 (2): 264–280.

- . 2011. “Gendered perceptions and political candidacies: A central barrier to women’s equality in electoral politics”. *American Journal of Political Science* 55 (1): 59–73.
- . 2010. *It still takes a candidate: Why women don’t run for office*. Cambridge University Press.
- . 2014. “Uncovering the origins of the gender gap in political ambition”. *American Political Science Review* 108 (3): 499–519.
- Fraile, Marta, and Raul Gomez. 2017. “Bridging the enduring gender gap in political interest in Europe: The relevance of promoting gender equality”. *European journal of political research* 56 (3): 601–618.
- Frazer, Elizabeth, and Kenneth Macdonald. 2003. “Sex differences in political knowledge in Britain”. *Political Studies* 51 (1): 67–83.
- Fridkin, Kim, and Patrick J. Kenney. 2009. “The role of gender stereotypes in US Senate campaigns”. *Politics & Gender* 5 (3): 301–324.
- Green, Donald, Bradley Palmquist, and Eric Schickler. 2002. *Partisan Hearts and Minds*.
- Grose, Christian R., Maruice Mangum, and Christopher Martin. 2007. “Race, political empowerment, and constituency service: Descriptive representation and the hiring of African-American congressional staff”. *Polity* 39 (4): 449–478.
- Hainmueller, Jens, Dominik Hangartner, and Teppei Yamamoto. 2015. “Validating vignette and conjoint survey experiments against real-world behavior”. *Proceedings of the National Academy of Sciences* 112 (8): 2395–2400.
- Hainmueller, Jens, Daniel J. Hopkins, and Teppei Yamamoto. 2014. “Causal inference in conjoint analysis: Understanding multidimensional choices via stated preference experiments”. *Political Analysis* 22 (1): 1–30.
- Hansen, Kasper Møller. 2017. “Valgdeltagelsen ved kommunal-og regionsvalget 2017”. *CVAP Working paper series*.
- Hayes, Danny, and Jennifer L. Lawless. 2015. “A Non-Gendered Lens? Media, Voters, and Female Candidates in Contemporary Congressional Elections”. *Perspectives on Politics* 13 (1): 95–118. doi:10.1017/S1537592714003156.

- Huddy, Leonie, and Nayda Terkildsen. 1993. "The consequences of gender stereotypes for women candidates at different levels and types of office". *Political Research Quarterly* 46 (3): 503–525.
- Inglehart, Ronald, and Pippa Norris. 2003. *Rising tide: Gender equality and cultural change around the world*. Cambridge University Press.
- Jacobson, Gary C., and Jamie L. Carson. 2015. *The politics of congressional elections*. Rowman & Littlefield.
- Juenke, Eric Gonzales, and Robert R. Preuhs. 2012. "Irreplaceable Legislators". *Rethinking Minority*.
- Kage, Rieko, Frances McCall Rosenbluth, and Seiki Tanaka. 2017. "What Explains Low Female Political Representation? Evidence from Survey Experiments in Japan".
- Kanthak, Kristin, and Jonathan Woon. 2015. "Women don't run? Election aversion and candidate entry". *American Journal of Political Science* 59 (3): 595–612.
- Kirkland, Patricia A., and Alexander Coppock. 2017. "Candidate Choice Without Party Labels". *Political Behavior*: 1–21.
- Kittilson, Miki Caul, and Kim Fridkin. 2008. "Gender, candidate portrayals and election campaigns: A comparative perspective". *Politics & Gender* 4 (3): 371–392.
- Kjær, Ulrik. 2013. "Efter de første 100 år – kvinder i dansk kommunalpolitik 1909-2009". Chap. 17 in *KV09. Analyser af kommunalvalget 2009*, ed. by Jørgen Elklit and Ulrik Kjær, 321–338. Odense: Syddansk Universitetsforlag.
- Kjær, Ulrik, and Karina Kosiara-Pedersen. 2018. "The hourglass pattern of women's representation". *Journal of Elections, Public Opinion and Parties*: 1–19.
- Kosiara-Pedersen, Karina, and Kasper Møller Hansen. 2013. *Danske partimedlemmer 2012*.
- Ladam, Christina, Jeffrey J. Harden, and Jason H. Windett. 2018. "Prominent Role Models: High-Profile Female Politicians and the Emergence of Women as Candidates for Public Office". *American Journal of Political Science* 62 (2): 369–381.
- Lawless, Jennifer L. 2015. "Female candidates and legislators". *Annual Review of Political Science* 18:349–366.
- Lawless, Jennifer L., and Richard L. Fox. 2004. "Why don't women run for office". *Taubman Center for Public Policy, Providence: Brown University Press*.

- Lawless, Jennifer L., and Kathryn Pearson. 2008. "The primary reason for women's underrepresentation? Reevaluating the conventional wisdom". *The Journal of Politics* 70 (1): 67–82.
- Lovenduski, Joni. 2005. *Feminizing politics*. Polity.
- McDermott, Monika L. 1998. "Race and gender cues in low-information elections". *Political Research Quarterly* 51 (4): 895–918.
- . 1997. "Voting cues in low-information elections: Candidate gender as a social information variable in contemporary United States elections". *American Journal of Political Science*: 270–283.
- McElroy, Gail, and Michael Marsh. 2010. "Candidate gender and voter choice: Analysis from a multimember preferential voting system". *Political Research Quarterly* 63 (4): 822–833.
- Norris, Pippa. 1996. "Women politicians: transforming Westminster?" *Parliamentary Affairs* 49 (1): 89–103.
- Nye, John V.C., Ilia Rainer, and Thomas Stratmann. 2014. "Do black mayors improve black relative to white employment outcomes? Evidence from large US cities". *The Journal of Law, Economics, & Organization* 31 (2): 383–430.
- Ono, Yoshikuni, and Masahiro Yamada. 2016. "Do Voters Prefer Gender Stereotypic Candidates?: Evidence from a Conjoint Survey Experiment in Japan".
- Palfrey, Thomas R., and Keith T. Poole. 1987. "The relationship between information, ideology, and voting behavior". *American journal of political science*: 511–530.
- Paul, David, and Jessi L. Smith. 2008. "Subtle sexism? Examining vote preferences when women run against men for the presidency". *Journal of Women, Politics & Policy* 29 (4): 451–476.
- Preece, Jessica Robinson, Olga Bogach Stoddard, and Rachel Fisher. 2016. "Run, Jane, run! Gendered responses to political party recruitment". *Political Behavior* 38 (3): 561–577.
- Sanbonmatsu, Kira. 2002. "Gender stereotypes and vote choice". *American Journal of Political Science*: 20–34.
- Schwarz, Susanne, William Hunt, and Alexander Coppock. 2018. "What Have We Learned About Gender From Candidate Choice Experiments? A Meta-analysis of 30 Factorial Survey Experiments".

- Sen, Maya. 2017. "How political signals affect public support for judicial nominations: Evidence from a conjoint experiment". *Political Research Quarterly* 70 (2): 374–393.
- Shames, Shauna L. 2017. *Out of the running: Why millennials reject political careers and why it matters*. NYU Press.
- Silbermann, Rachel, et al. 2015. "Gender roles, work-life balance, and running for office". *Quarterly Journal of Political Science* 10 (2): 123–153.
- Stone, Walter J., and L. Sandy Maisel. 2003. "The not-so-simple calculus of winning: Potential US house candidates' nomination and general election prospects". *The Journal of Politics* 65 (4): 951–977.
- Teele, Dawn L., Joshua Kalla, and Frances Rosenbluth. 2018. "The Ties that Double Bind: Social Roles and Women's Underrepresentation in Politics". *American Political Science Review*: 1–17.
- Wolbrecht, Christina, and David E. Campbell. 2017. "Role models revisited: youth, novelty, and the impact of female candidates". *Politics, Groups, and Identities* 5 (3): 418–434.

Appendix 1: Example of conjoint pair

Suppose that the following two potential candidates run for a seat in the municipality council. Which of the two candidates would you like to vote for? Even if you are not entirely sure, please indicate which of the two you would prefer if you had to choose either one of them.

Candidate A		Candidate B
55	Age	40
Peter	Name	Anne
Unskilled	Educational background	Lawyer
7 years	Political experience	11 years
Strongly agree	Should local taxes be reduced?	Agree
Agree	Should municipalities secure diversity in schools?	Disagree
Liberal Party	Party affiliation	Liberal Party

Figure 7: Example of conjoint pair

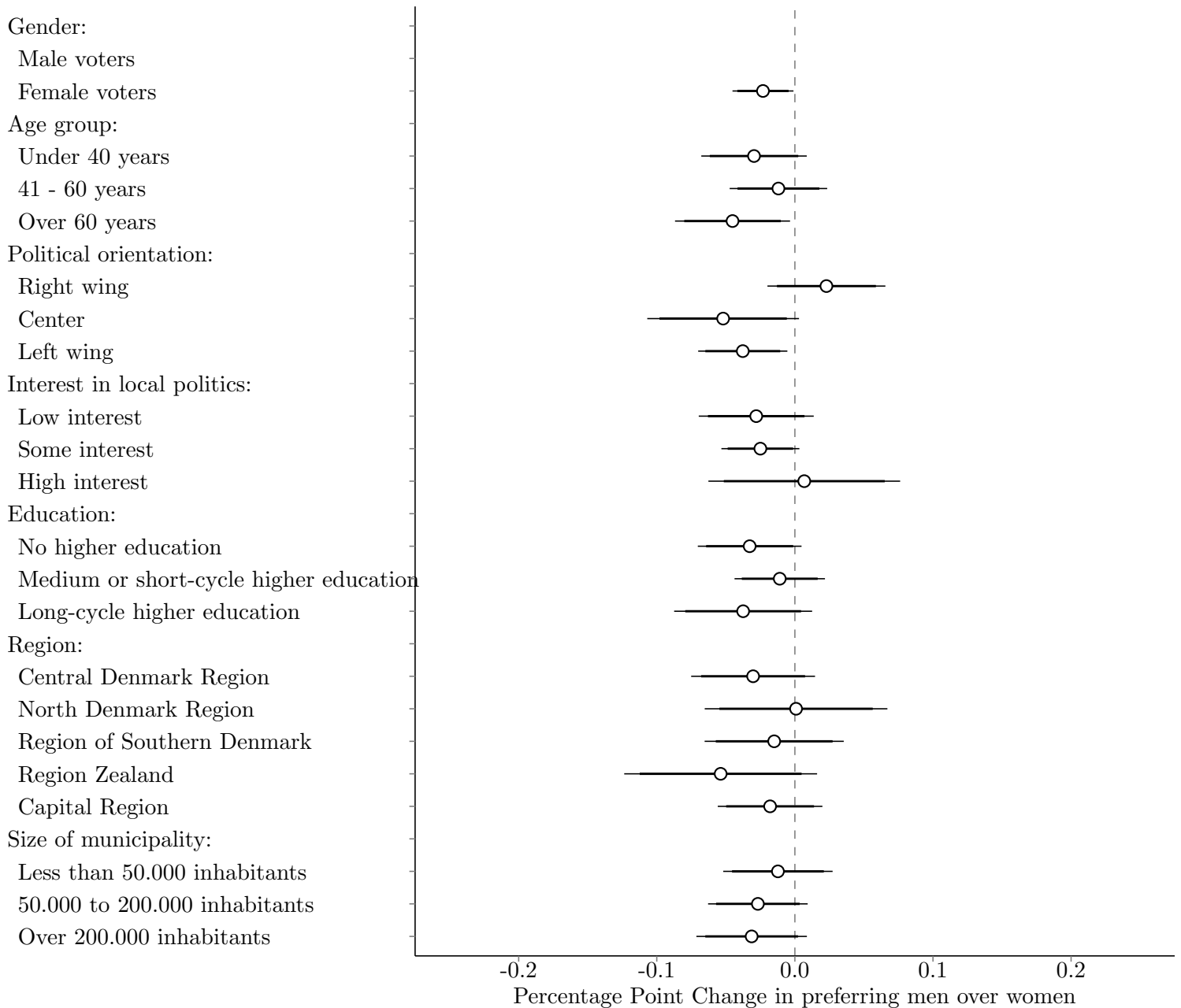
Appendix 2: The distribution of traits for the real pool of candidates

The table below shows the distribution of traits from the conjoint experiment for the real world candidates. All the data are from the latest election in 2017 apart from the data on the candidates' education, which is only available for the election in 2013.

	Women	Men	Total	Year
Name				
Arabic	2.3 %	3.4 %	3.1 %	2017
Danish	97.7 %	96.6 %	96.9 %	2017
Profession				
No higher education	12.5 %	15.7 %	14.7 %	2013
Vocational education	25.4 %	37.6 %	33.9 %	2013
Medium or short-cycle higher education	37.8 %	24.9 %	28.8 %	2013
Long-cycle higher education	24.3 %	21.8 %	22.6 %	2013
Experience				
Elected in last election	16.9 %	20.5 %	19.4 %	2017
Not elected in last election	83.1 %	79.5 %	80.6 %	2017
Age group:				
Under 30 years	8.4 %	8.3 %	8.4 %	2017
30-39 years	12.9 %	10.4 %	11.2 %	2017
40-49 years	25.7 %	20.8 %	22.3 %	2017
50-59 years	26.5 %	26.2 %	26.3 %	2017
Over 60 years	26.6 %	34.3 %	31.9 %	2017
Lower tax:				
Disagree strongly	46.1 %	34.7 %	38.3 %	2017
Partially disagree	13.4 %	14.9 %	14.4 %	2017
Neither agree nor disagree	13.6 %	15.2 %	14.7 %	2017
Partially agree	11.5 %	14.8 %	13.8 %	2017
Agree strongly	15.4 %	20.5 %	18.9 %	2017
Socially diverse schools:				
Disagree strongly	6.6 %	8.0 %	7.6 %	2017
Partially disagree	9.4 %	9.7 %	9.6 %	2017
Neither agree nor disagree	11.3 %	10.0 %	10.4 %	2017
Partially agree	33.9 %	31.6 %	32.3 %	2017
Agree strongly	38.7 %	40.7 %	40.1 %	2017

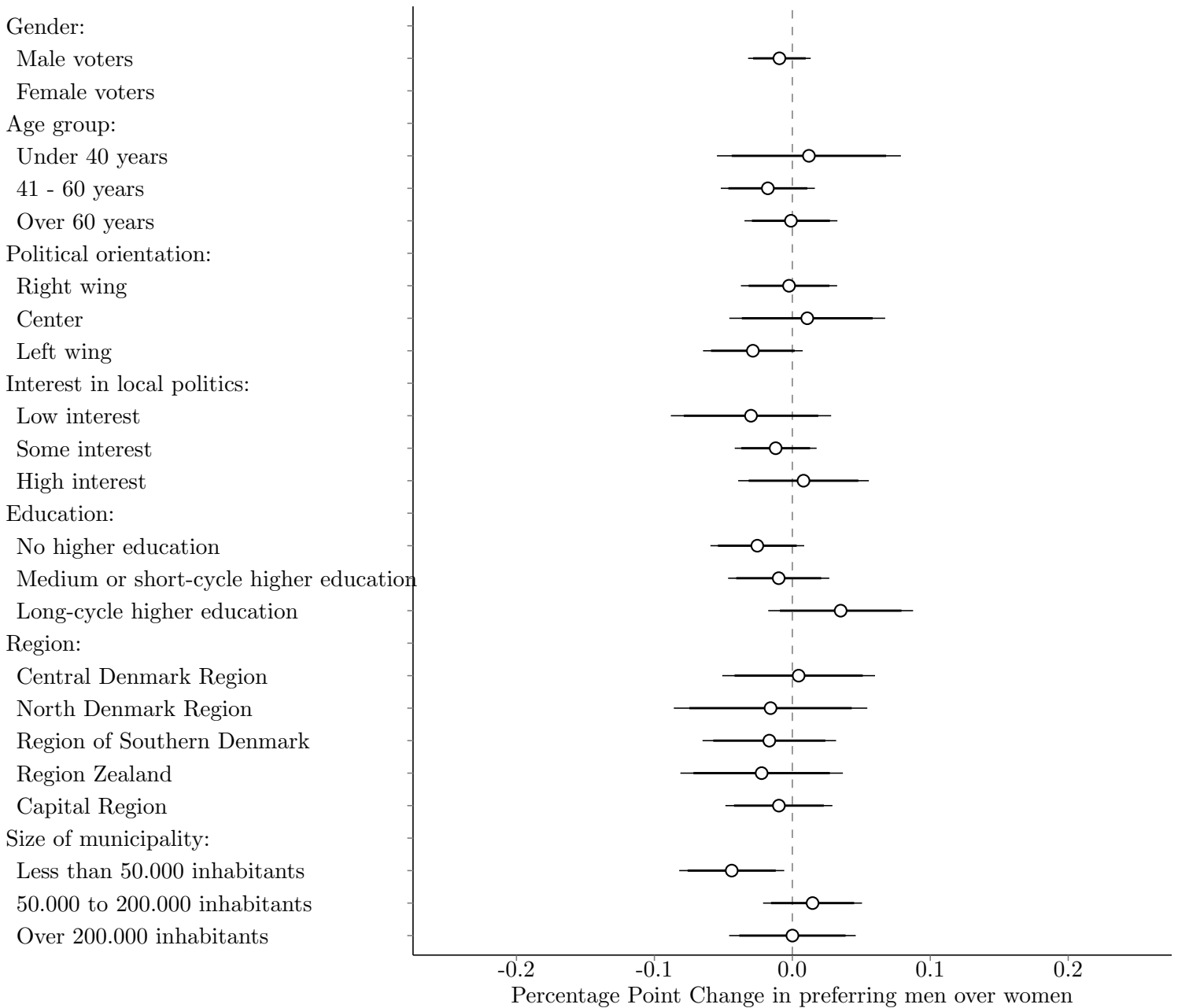
Appendix 3: Effect heterogeneity for men and women separately

Figure 8: Conjoint experiment: Effects of being male for different types of voters. Only female voters



The figure indicates how much less (or more) a male candidate is preferred to a female candidate across different types of voters. If the dot is to the left of the baseline a female candidate is preferred and vice versa. On a scale from 1 to 5, a voter, who answered 1 or 2 is coded as having "low interest", 3 or 4 as having "some interest" and 5 as having "high interest".

Figure 9: Conjoint experiment: Effects of being male for different types of voters. Only male voters



The figure indicates how much less (or more) a male candidate is preferred to a female candidate across different types of voters. If the dot is to the left of the baseline a female candidate is preferred and vice versa. On a scale from 1 to 5, a voter, who answered 1 or 2 is coded as having "low interest", 3 or 4 as having "some interest" and 5 as having "high interest".

Appendix 4: Descriptive statistics

Table 2: Descriptive statistics

Statistic	N	Mean	St. Dev.	Min	Max
Female	1,551	0.51	0.50	0.00	1.00
Likely	1,561	0.22	0.41	0.00	1.00
I am interested in politics	1,606	3.51	1.14	1.00	5.00
I have time to engage in local politics	1,573	2.71	1.21	1.00	5.00
I am qualified to participate in politics	1,572	2.86	1.33	1.00	5.00
If I ran as a candidate I would be elected	1,325	1.95	1.12	1.00	5.00
Age	1,546	53.99	16.13	18.00	100.00
Member of a party	1,601	0.11	0.32	0.00	1.00
Left-right scale	1,500	4.85	2.35	0.00	10.00
Primary School	1,539	0.08	0.27	0.00	1.00
General upper secondary education	1,539	0.09	0.28	0.00	1.00
Vocational upper secondary education	1,539	0.24	0.43	0.00	1.00
Short-cycle higher education	1,539	0.11	0.31	0.00	1.00
Medium-cycle higher education	1,539	0.21	0.41	0.00	1.00
Bachelor's degree	1,539	0.10	0.31	0.00	1.00
Long cycle higher education	1,539	0.17	0.38	0.00	1.00
Region Hovedstaden	1,620	0.34	0.47	0.00	1.00
Region Midtjylland	1,620	0.21	0.41	0.00	1.00
Region Nordjylland	1,620	0.10	0.30	0.00	1.00
Region Sjælland	1,620	0.13	0.34	0.00	1.00
Region Syddanmark	1,620	0.22	0.41	0.00	1.00

Appendix 5: High threshold. 0-8 is unlikely, 9-10 is likely.

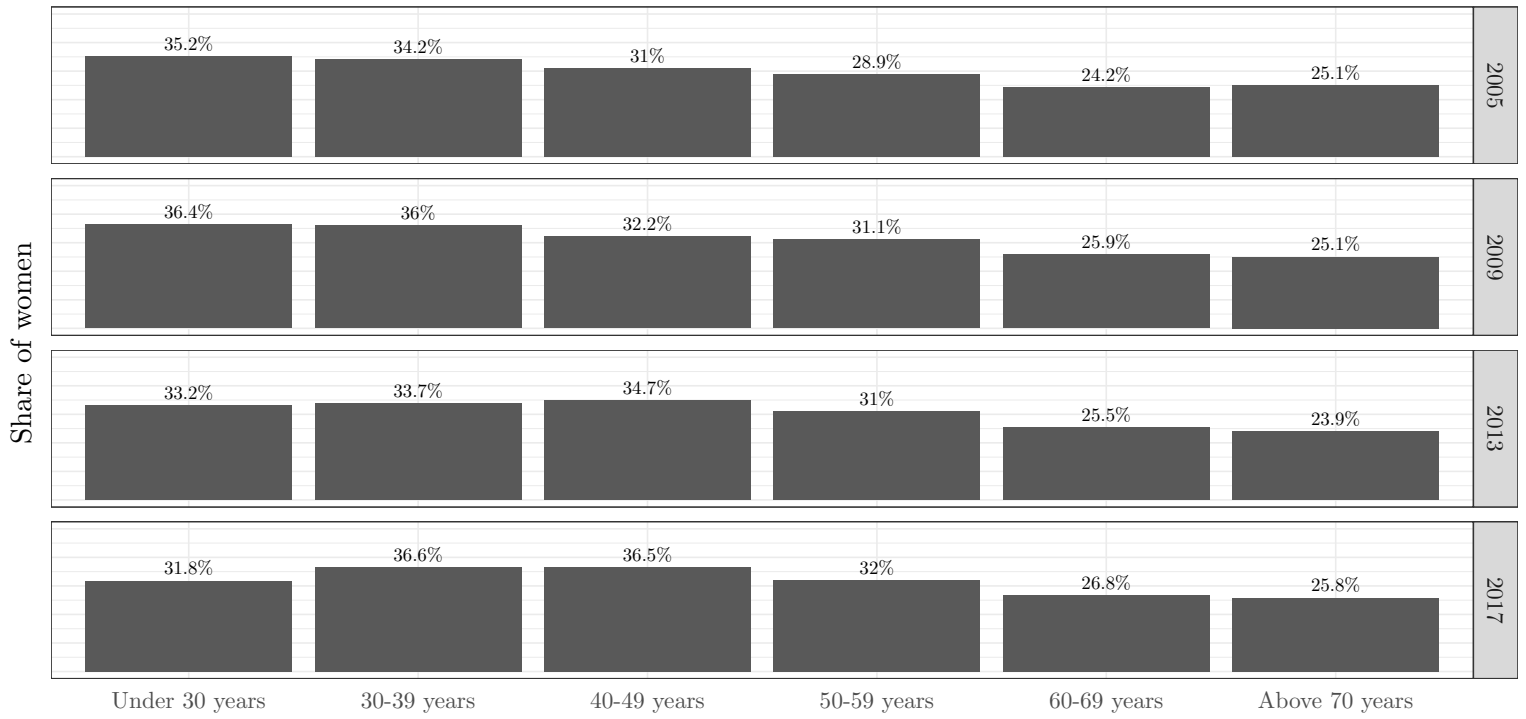
Table 3: Association between personal traits and a person saying it is likely they would run if encouraged to run

	<i>Dependent variable:</i>							
	Likelihood of a person being interested in running							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Male (ref)	-	-	-	-	-	-	-	-
Female	-0.83*	-0.63*	-0.67*	-0.22	-0.50	-0.22	-0.22	-0.30
	(0.28)	(0.28)	(0.28)	(0.29)	(0.29)	(0.29)	(0.33)	(0.36)
I am interested in politics		0.53*				-0.07	0.02	0.01
		(0.15)				(0.17)	(0.18)	(0.20)
I have time to engage in local politics			0.49*			0.12	0.17	0.20
			(0.11)			(0.14)	(0.15)	(0.16)
I am qualified to participate in politics				0.99*		0.76*	0.79*	0.60*
				(0.14)		(0.17)	(0.19)	(0.20)
If I ran as a candidate I would be elected					0.75*	0.37*	0.34*	0.40*
					(0.11)	(0.13)	(0.13)	(0.14)
Primary school (ref)							-	-
General upper secondary education							-1.19	-1.70*
							(0.74)	(0.84)
Vocational upper secondary education							-0.01	-0.15
							(0.57)	(0.61)
Short-cycle higher education							0.36	0.37
							(0.62)	(0.65)
Medium-cycle higher education							-0.38	-0.42
							(0.58)	(0.61)
Bachelor's degree							-1.27	-1.39
							(0.78)	(0.81)
Long cycle higher education							-0.46	-0.82
							(0.58)	(0.64)
Age							-0.03*	-0.03*
							(0.01)	(0.01)
Capital Region (ref)							-	-
Central Denmark Region							0.49	0.67
							(0.42)	(0.45)
North Denmark Region							0.52	0.73
							(0.52)	(0.55)
Region Zealand							0.45	0.68
							(0.46)	(0.50)
Region of Southern Denmark							0.98*	0.97*
							(0.40)	(0.43)
Party member (ref)							-	-
Not a party member								-0.51
								(0.36)
Left-Right Scale								-0.34
								(0.20)
Left-Right Scale, squared								0.03
								(0.02)
Constant	-2.56*	-4.66*	-4.12*	-6.36*	-4.53*	-6.55*	-5.66*	-3.96*
	(0.16)	(0.65)	(0.43)	(0.64)	(0.38)	(0.75)	(0.99)	(1.25)
Observations	1,216	1,216	1,216	1,216	1,216	1,216	1,201	1,113
Log Likelihood	-243.02	-235.75	-233.13	-209.71	-218.84	-204.78	-192.83	-173.95

Note: Analysis based on logistic regression. Dependent variable is "Likely to run". Only respondents, who have answered have answered the questions to all four statements are included. *p<0.05.

Appendix 6: Female candidates in the future

Figure 10: The share of women by age groups over time



Appendix 7: Sample Characteristics

	Sample	Population
Female	49.7 %	50.6 %
Age, mean (sd)	53 (16.6)	49.1 (18)
Education (share with tertiary-level education)	49 %	34.1 %
Left-right position, 0-1 (sd)	.48 (.24) %	n.a. %

Note: Population data are for Danish citizens aged > 18. Source: Statistics Denmark (www.statistikbanken.dk)