Legislative representation and gender (bias)
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ABSTRACT
In nearly all countries, women are underrepresented and men are overrepresented in national legislatures. This distortion in representation might occur for several reasons. One set of explanations suggests that parties, voters, or both, might discriminate against women. In this analysis we examine potential discrimination by parties and ask if elected officials discriminate against women who are thinking about a career in politics. Evaluating whether discrimination occurs is notoriously difficult with observational studies, so we conduct a field experiment to examine whether elected officials in New Zealand respond differently to potential political aspirants based on their perceived gender. Our results show that elected officials are equally willing to respond to both male and female political aspirants. These findings support the results from recent work conducted in other developed democracies and suggest that parties do not discriminate against female political aspirants at this stage of the recruitment process.

KEYWORDS
Representation; gender; elected officials; discrimination; audit experiment

1. Introduction
To what extent do legislatures accurately reflect the diversity of their electorate?1 Specifically, to what extent are men and women represented in legislatures?2 Let us begin with an observation. It used to be common that women did not have the right to vote, even when men did. It used to be the case that women were not eligible to be elected to legislative office. Those days, at least for countries that choose their leaders via democratic elections, are long gone. In contemporary democracies, women vote and they run for office. And yet, when we look at the composition of legislatures around the world, it is noticeable that women are significantly underrepresented relative to their proportion in society. In 2018, just 21.8% of national-level lower house legislators were women.3 How does New Zealand, the empirical focus of this study, compare? While the vast majority of New Zealand’s political history has been dominated by men, things have evolved somewhat since the mid 1970s, and today the percentage of women legislators stands at just over 38%. This ranks New Zealand 19th in the world, joint with Macedonia.

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While things have obviously been improving in New Zealand and many other countries, it should be clear that we are still a long way from equal representation for men and women around the world.  

2. Representation

Representation occurs in stages. Loosely speaking, voter preferences are first translated into legislative seats, legislative seats are then translated into governments, and finally government proposals are translated into actual policy (Golder and Ferland 2018). Legislators play a key role in the process of turning voter preferences into policy outcomes. Whether all voters are equally represented in the legislature matters. Does this necessarily mean that it is important to have a legislature that accurately reflects the proportion of women and men in society? The answer to this question depends, perhaps, on what kind of representation we have in mind and what we think legislators are supposed to do. Consider two of the classic types of representation proposed by Hanna Pitkin (1967): descriptive representation and substantive representation.

According to descriptive representation, representatives should descriptively ‘stand for’ their constituents, something that can be achieved by having representatives who share the same characteristics, such as race, gender, or class, as the people they represent. Descriptive representation is thought to be particularly important for groups that have experienced a history of discrimination. As Mansbridge (1999), among others, explains, the inclusion of previously under-represented groups in the legislature can promote a sense of fairness and legitimacy, and the elected members of under-represented groups can both serve as role models for citizens, and as a sign that the norms about who gets to participate in politics are changing (Clark, Golder, and Golder, 2017, 719–20).

In the 2018 national legislative elections in the United States, two Native American women won seats for the first time. One of them, Deb Haaland, of the Laguna Pueblo Tribe in New Mexico, said that becoming a candidate and campaigning was challenging because there were no incumbent Indigenous Congresswomen for her to use as a role model. According to Haaland, ‘Running for Congress, there was no Native woman that I could go to and say, “Help me. Tell me what to do. How can I navigate this?” I hope to be that person for Native women running in the future’ (Hobson 2018).

Thus, there are reasons to think that descriptive representation is important in its own right. There are also reasons to believe, though, that descriptive representation is important because it helps improve ‘substantive representation’. Substantive representation occurs when representatives take actions that match the ideological and substantive interests of their constituents.

The idea here is that individuals who share similar descriptive characteristics are likely to have shared experiences that generate a common set of perspectives and substantive interests (Mansbridge 1999). In this sense, it is important to have women in the legislature because they have a common set of experiences that are not necessarily shared by male legislators. These common experiences result from many factors, including the fact that women typically share similar, often subordinate, positions in most societies. These shared experiences often mean that there are issues that are particularly salient to women or on which women take distinctive positions. Although men could
advocate on behalf of these issue positions, women are likely to receive greater substantive representation from a female legislator than a male one. One reason for this is that female legislators are likely to have an informational advantage with respect to these issues as a result of their personal experiences.

The descriptive and substantive representation that female politicians provide is highlighted in a comment about Angela Merkel shortly after she became Chancellor of Germany: ‘women like Angela Merkel who step onto the political stage make all women visible as citizens, with interests that are sometimes distinctive and sometimes overlapping with those of men, and create legitimacy for women acting politically’ (Ferree 2006, 95).

In the rest of the paper, we take it as a given that there is value to descriptive representation, either directly or indirectly (through substantive representation). We know that women are underrepresented in the legislature relative to their proportion in the electorate. But how exactly does this distortion occur? One way of approaching this issue is to think about where distortions might occur in the process of going from a member of the public to an elected legislator.

3. Discrimination

There are at least three stages to the process of becoming an elected official. In the first stage, an eligible member of the public must declare themselves as a potential candidate. In the second stage, a political party must be willing to make that person a candidate, by placing them on a party list or allowing them to run under the party label in a specific district. In the third stage, the voters must select the candidate to be their elected representative. Distortions in the representation of women can occur at any of these stages.

When examining the proportion of women in public office, or in some other workplace, people often use the metaphor of a ‘leaky pipeline,’ suggesting that women and men enter into the pipeline at similar rates. Note, though, that distortions can come from differences in the rate at which men and women ‘leak’ from the pipeline and from differences in the proportion of men and women entering the pipeline. Understanding the role that gender plays in the representation process requires us to examine both men and women, as this is the only way to identify and explain ‘differential’ rates of gender representation.

In this three-stage framework, there are two points at which bias or discrimination could occur against women. First, parties might discriminate against women. Second, voters might discriminate against women. Discrimination occurs when members of a group (such as women) are treated differentially (less favourably) to members of another group (such as men) with otherwise identical characteristics in similar circumstances (Bertrand and Duflo 2017). Measuring discrimination, and determining if everything aside from group status can be considered to be identical, is difficult. Although we observe that women are underrepresented in legislatures around the world, is this because of discrimination? It is difficult to identify discrimination through observational data. The standard observational approach involves looking at the woman coefficient in some regression analysis to see if it has a particular sign and if it is statistically significant. The concern here is that there may be
omitted variable bias – that is, there might be some other factor that is correlated with gender and the thing that we are trying to explain that is not included in our model. If this is the case, then we are not comparing individuals who share identical characteristics, other than their gender, in similar circumstances.

A common response to this is to control for as many things as possible. This is problematic, however. First, there are often characteristics such as ambition or campaigning skill that differentiate between individuals but that are either unobserved or difficult to measure. Second, even if we could include all of the relevant variables, we often run into the problem of post-treatment bias. This occurs when researchers condition on covariates that are affected by individual gender, the treatment of interest in this case. Since gender is often assigned at birth or early in someone’s life, most things in our life are affected by our gender. Indeed, many of the things that we would like to control for to isolate the effect of gender, such as, say, level of education or ambition, are likely in part the result of someone’s gender. This means that it is quite challenging to control for all of the relevant things in our model without inducing post-treatment bias. Post-treatment bias is particularly problematic for the researcher, as the bias can be in any direction and there are no clear solutions for drawing correct inferences about gender discrimination from observational data without making additional assumptions.

It is partly as a response to these research design issues that many scholars are increasingly turning to experiments to measure and explain gender discrimination. Before looking at some of the experimental evidence on discrimination, what do we know about the extent to which men and women put themselves forward for careers in politics? Do men and women enter the representation pipeline at the same rate? The answer appears to be no, at least in the North American and Latin American contexts. Studies consistently find that women are less likely to put themselves forward as candidates for elected office than men (Lawless and Fox 2005; Fulton et al. 2006; Fox and Lawless 2010; Htun 2016). Put differently, the supply of female candidates is lower than the supply of male candidates (Htun 2016).

There appear to be several factors at work here. One factor has to do with qualifications. While women now have similar educational and career opportunities to men, women often feel less qualified to run for office even if they have similar qualifications (Fox and Lawless 2010). Another factor has to do with political ambition. While the evidence is somewhat mixed, several studies find that women express less interest in politics and are less politically ambitious than men. Lawless and Fox, for example, find that male college students in the United States in both 2001 and 2011 were 16 percentage points more likely than female college students to have considered running for office (Lawless and Fox 2012). A third factor has to do with the level of encouragement that others give to women and men to run. The same study by Lawless and Fox finds that female college students in the US are less likely to have been encouraged to run for office. A fourth factor has to do with the different demands placed on men and women. These demands often have to do with the greater caregiving responsibilities placed on women than men (Lawless and Fox 2005). Not all women have such constraints, and many men do; the claim, though, is that on average women are more constrained, and that this depresses their likelihood of launching a campaign for office.

In a recent experiment, Kanthak and Woon (2015) argue that women are also put off from running by the very nature of electoral competition. They find that women are no
less ambitious or qualified than men. In their experiment, women are as likely to put themselves forward as men for a leadership position if the leadership position is to be selected at random but less likely if there is a campaigning process followed by an election. Kanthak and Woon speculate that an aspect of this election aversion on the part of women may be related to a lack of trust in the electoral system to select the best representative or that women are more likely to avoid situations of political competition and social evaluation altogether.

Some of the factors mentioned above may be the result of expectations on the part of women that they will face discrimination if they put themselves forward. For example, do we know that women really have less political ambition than men, all else equal, or are they rationally responding to expected discrimination against women by parties and voters?

This point highlights another potential issue with observational studies, namely that the women who do choose to run are likely to be quite different, for unobserved reasons, both from the women who do not run and the men who choose to run. Thus, in addition to omitted variable bias and post-treatment bias, selection bias is also a problem with observational studies.

Do voters discriminate against women? While the evidence is somewhat mixed, there does not seem to be consistent evidence to support the claim that voters, on average, discriminate against women. Indeed, there is some evidence that voters actually prefer female candidates (Golder et al. 2017; Schwarz, Hunt, and Coppack 2018).

Perhaps the first thing to note is that studies going back several decades in the United Kingdom and the United States have found that partisanship tends to be much more important than candidate gender when it comes to vote choice (Welch and Studlar 1988; Lawless and Pearson 2008; Fulton 2014). In recent years, a variety of experiments have examined vote choice and candidate gender. Some find that voters are less willing to vote for women, some find that voters are more willing to vote for women, and some find that voters are neither more nor less willing to vote for women. In a meta-analysis of thirty survey experiments, though, Schwarz, Hunt, and Coppack (2018) find that voters tend to prefer female candidates to male candidates. The size of this positive female bump is about 2%.

One potential concern with these types of vote choice experiments is ‘social desirability bias’ where respondents give the socially acceptable vote choice rather than their actual vote choice, or ‘experimenter demand effects’ where respondents give the answer they think the researcher wants (Zizzo 2010). One possible way around these issues would be to conduct conjoint experiments. In a conjoint experiment, the analyst varies multiple things, making it harder for respondents to figure out the purpose of the experiment, thus reducing the ability of the respondent to identify the ‘correct’ response (Horiuchi, Markovich, and Yamamoto 2018). This is a promising avenue for future research.

A recent survey experiment found no evidence that people are reluctant to vote for women in the context of European Parliament (EP) elections (Golder et al. 2017). The study examined how changing the electoral rules influences the probability that individuals vote for women in EP elections. Participants were given the opportunity to vote for real EP candidates using three different electoral systems that varied according to how open they were, or how much choice a voter had over specific candidates. Female
candidates received more votes as the voting system became more open. This was true for both male and female respondents, although the effect was larger for female respondents. In terms of our current discussion, there was no sign that voters were less willing to vote for women than men under any of the electoral systems.

If we do not have consistent evidence that voters discriminate against female candidates, what about parties? Do parties discriminate against female candidates? On the whole, less research focuses on parties than on voters. Moreover, almost all of the studies rely on observational data and research designs that suffer from one or more of the limitations discussed earlier. What research there is suggests that there may be some discrimination against women. Some studies find that parties are reluctant to place women in the most electable positions. In countries with single-member districts, for example, men end up running in safer districts, while women get to run in districts where their chances of electoral victory are poorer (Murray, Krook, and Opello 2012; Thomas and Bodet 2013). In countries with proportional representation electoral rules, some parties place women in lower positions on their party list than men, at least when there is no impediment to doing so (Carton 2001; Kenny and Verge 2013; Luhiste 2015). It is important to remember, though, that these observed differences may not necessarily be due to gender discrimination. Unmeasured or unobserved differences between male and female candidates may be driving at least some of these party choices.

As we mentioned earlier, one way of dealing with these issues would be to conduct experimental research on party discrimination. But conducting experiments with political elites is difficult. It is not easy to get party elites into a lab to participate in experiments, or to get them to use randomized campaign tactics in the field. Fortunately, the task is not impossible.

Here we turn to a specific experimental approach to measuring discrimination that has proven valuable across the social sciences, and which we will use in this study. The approach involves a type of experimental design commonly known as an audit or correspondence study. This type of experiment was first developed in the 1940s and 1950s and is a type of field experiment. That is, it is a kind of experiment in which the researcher uses randomized treatments in a real-world setting, rather than in a lab or in a survey instrument.

In an audit study, the researcher varies some characteristic of individuals, keeping everything else the same, and then sends these individuals, or messages from these individuals, into the field to see if the randomized characteristics affect some outcome of interest (Bertrand and Duflo 2017). For example, early audit studies would send individuals from different racial backgrounds, but with otherwise identical qualifications, to apply for jobs. Other studies would send couples from different racial backgrounds, but identical references and reported household incomes, to apply for rental housing. The goal was to see if employers or landlords would respond differently to these individuals based on their race or ethnicity.

Large scale audit studies took place in both the UK and the US in the late 1960s, after legislation in both countries made certain kinds of racial discrimination illegal. Prior to this time, such discrimination was not necessarily considered inappropriate, and it was also not necessarily seen as socially undesirable to admit to using race as a criterion for hiring or renting apartments. If people will openly admit to discriminatory behaviour, then researchers have no need to design audit studies. However, once the laws change.
and attitudes about socially desirable behaviour change, people who discriminate will be reluctant to admit to doing so (Bonilla-Silva and Forman 2000, 52). It can also be the case that sometimes people hold implicit biases and are not even consciously aware that they are engaging in discriminatory behaviour.

Audit studies allow the researcher to avoid asking people if they discriminate, which is important as people are unlikely to answer such a question honestly or perhaps even be aware of their own behaviour. Although the original audit studies used in-person designs, researchers in 1969 in the UK implemented the first ‘correspondence’ audit study. As the name suggests, rather than sending individuals in person to an employer, they sent job applications by mail. Over the past several decades, researchers in a wide range of countries have used both in-person and correspondence methods to assess discrimination with respect to race, gender, history of incarceration, religion, national origin, and parental or relationship status, among other individual characteristics (Gaddis 2018).

4. Measuring the responsiveness of political elites

In recent years, researchers have increasingly used audit studies to examine the responsiveness of political elites to different groups. Political actors, such as party elites and elected officials, are challenging to study because their decisions are often made behind closed doors and their public explanations for their decisions do not necessarily reflect the real reason for their actions. Public pronouncements of party elites are, after all, strategic, designed to appeal to party members and potential voters. This is not to suggest that the explanations they provide for their decisions are not truthful, but rather that it is difficult for the researcher to assess the veracity of their explanations. Audit studies are a useful approach in this context.

Consider a recent audit study looking at gender discrimination and elected officials in the United States. Kalla, Rosenbluth, and Teele (2018) took as their starting point the claim that women may need more encouragement than men to run for office. An obvious and important source of encouragement for someone considering entering politics is elected officials and party elites. Do elected officials in the United States respond differently to men and women when the officials receive a request for advice about entering politics? In other words, do elected officials discriminate against women who are thinking about a career in politics?

To address this question, Kalla, Rosenbluth, and Teele sent emails to around 8,000 state-level and local-level officials from hypothetical students expressing an interest in politics and asking officials how to start a political career. The authors conceived of this ‘early email correspondence as a type of “micro”-mentorship where even a small act of encouragement can teach an aspirant about the profession and provide cues about whether he or she will be welcome’ (Kalla, Rosenbluth, and Teele 2018, 338). The short emails were distinguished only by the name of the sender, which signalled whether the student asking for advice was male or female.

The researchers found, contrary to their theoretical expectations, that the response rates to the female students were slightly higher than the response rates to the male students – 27% compared to 25%. This difference was not statistically significant. The higher response rates towards female students were largely driven by male elected
officials; the female elected officials responded at equal rates to the male and female students. Again contrary to their theoretical expectations, the researchers found that there were no significant differences in the response rates to men and women across the two political parties, the Democrats and the Republicans.

What should we make of these results, which run counter to the expectations in the literature? One concern with experiments is that while they maximize internal validity, they may sacrifice some external validity. External validity refers to our ability to determine whether a treatment effect, such as gender, differs across contexts. Does the treatment effect generalize? One way to address concerns with external validity is to replicate an experimental study in a different context. Arguably, replication is especially important when findings run counter to the expectations in the literature, as is the case here.

Dhima (2018) replicated the Kalla et al. study in Canada. As was the case in the American study, Dhima finds no evidence that elected officials discriminate against women interested in starting political careers. Indeed, she finds that elected officials are actually significantly more likely to respond to female students than male students.

What might we find if we conducted the same study in New Zealand? In what follows, we present a replication of the Kalla, Rosenbluth, and Teele (2018) and Dhima (2018) studies in New Zealand. Like the United States and Canada, New Zealand experienced British settler colonialism, and English is widely spoken. This similarity is useful because the experiment used in the United States and in Canada can be implemented without needing to make significant alterations to the research design.

We begin with some background. In New Zealand, women currently comprise 38% of national legislators and 34% of district councillors. These percentages, like those in most other countries, suggest that there is a distortion somewhere in the electoral process. As Jean Drage noted in the 2017 ‘Women Talking Politics’ magazine of the New Zealand Political Studies Association, the proportion of women elected to local councils has not changed much since the beginning of the 21st century, when the 30% mark was reached. Although the first woman was elected as mayor in 1893, the numbers of women elected to local office was very low for the better part of a century.

Then, in the 1980s, ‘the numbers of women started to rise markedly due mainly to the increased efforts of the Women’s Electoral Lobby which encouraged women to stand as candidates and distributed information for women on how to take part in local government’ (Drage 2017, 8). This history suggests that advice and encouragement is an effective strategy for increasing the political participation of women, particularly in getting them to run for office. If we are interested in encouraging gender parity in politics, then verifying whether elected officials treat potential candidates similarly could be important.

At the national level, the proportion of women elected to the parliament also increased rapidly in the 1980s, reaching 21% by 1993, a percentage which was ‘exceptionally high for a country with a first-past-the-post system’ (Curtin 2003, 63). The significant change in electoral rules in 1996, from the majoritarian first-past-the-post system to a mixed member proportional (MMP) system, likely contributed to the further increase in numbers of women entering the national parliament. Indeed, the first election after MMP was adopted saw women gain 29% of the seats in the legislature (Curtin 2003, 56). These results are similar to those found in the comparative electoral
systems literature more broadly, that the proportion of women in elected office tends to be higher in countries that use more proportional electoral systems (Wängnerud 2009; Kittilson and Schwindt-Bayer 2012). As Curtin (2003) notes, the introduction of a proportional element to New Zealand elections has led not only to the success of women on the party lists, but also to women being more competitive in the single member districts, and that this suggests that the major parties seem to value having women candidates.

In our study, we used the same experimental treatment that Kalla, Rosenbluth, and Teele (2018) and Dhima (2018) did. We sent brief email messages from university students to a sample of 953 local and nationally elected officials. The gender of the student was indicated by the name of the putative student. The name is the only indication of gender and is the only thing that differs across the emails. We used four different hypothetical student names to ensure that our findings are not driven by idiosyncratic reactions to one or two names (Crabtree and Chykina 2018; Gaddis 2018). For the names of our senders, we wanted names from the original study that are also common names in New Zealand, to replicate the original study as closely as possible. As noted above, the similar colonial backgrounds of these countries means that many British names are common across the United States, Canada, and New Zealand. We found the most common surnames in New Zealand, as well as popular baby names in New Zealand from about 19 years ago, and then tried to match them with names from the ones in the original Kalla, Rosenbluth, and Teele (2018) study. We were able to choose names that would seem like typical names for a university student in New Zealand and would also mimic the ones used in the original study. We had a smaller sample of elected officials to contact, and so only needed a fraction of the names used in the U.S. study.

The text of the email is shown below. [MALE/FEMALE NAME] indicates where we inserted our randomized manipulation.

Subject: Help on a class project?
Dear [POLITICAL OFFICIAL],

My name is [MALE/FEMALE NAME] and I am a second-year university student. I’m interviewing politicians for a class project to learn about how they entered their field and what advice they might have for students interested in politics. As someone who really cares about my community, one day I hope to be a politician. What advice would you give to me?

Sincerely,

[MALE/FEMALE NAME]

What were our expectations for the outcome of the study in New Zealand? Following the existing literature, Kalla, Rosenbluth, and Teele (2018) had expected that there would be evidence of some gender bias such that emails from women would be less likely to receive responses than emails from men. As we mentioned already, though, this is not what they found. Nor is it what Dhima (2018) found in her Canadian study. Is there reason to think, then, that we should find bias in New Zealand? Note that the percentage of women in local offices in New Zealand is similar to that in the U.S. and Canada.
The percentage of women at the national level is substantially higher, though. Another comparison point is that the United States has never had a woman as head of government, Canada had one for not quite four and a half months back in 1993, and New Zealand is currently governed by its third female prime minister. As far as visibility of women in politics goes, New Zealand seems qualitatively different than the other two countries. Additionally, women in New Zealand have a longer history of voting than in any other country. These aspects of the New Zealand political history and context led us to expect that elected officials in New Zealand would be equally likely to respond to male and female students.

We also collected some publicly available information on the elected officials so that we could check whether the effect of our treatment variable – the student’s gender – varies with the gender, age, or level of office of the elected official. Why might we expect our treatment effect to vary along these lines? This is because the existing literature suggests that elected officials are more likely to respond to constituents with whom they share an identity (Butler and Broockman 2011; Butler 2014). With respect to gender affinity (Brians 2005), male officials might be likely to be more responsive to men and female officials to be more responsive to women. We might also expect that the age of the official might be a proxy for attitudes about gender roles, with older officials being less likely to respond to emails from women than younger officials. Finally, it is possible that national-level officials might have different responses than local ones, perhaps due to differences in professionalization, the role of political parties at the national level, or because they have additional resources such as their own staff. We do not expect to find that the effect of the treatment variable differs across the two levels.

We emailed our sample of 953 legislators over a three-day period in November 2018. Our overall response rate was 31%, five percentage points higher than in the original US study. In addition to coding whether officials replied or not, we also coded whether the official provided a helpful response or not. That is, did an official respond with some advice for the student? We considered emails to contain helpful replies if they provided useful, actionable advice. Some examples of this include if an official suggested that (1) the student spend some time volunteering, (2) the student gain business experience, or (3) the student develop their listening skills. The responses contained useful advice 46% of the time; of the responses that did not offer useful advice, many did encourage the student to call or set up a meeting (typically over coffee). We are not principally interested in whether officials replied, but rather whether the likelihood of receiving a reply and the likelihood of receiving a helpful reply are different according to whether the email request came from a woman or a man.

Our sample of 953 New Zealand legislators replied to 30% of the emails from female students and 32% of the emails from male students. They provided female students with helpful replies 14% of the time, while male students received them 15% of the time. To determine if these differences in reply rates and helpful reply rates are statistically significant, we follow current practice in the experimental literature and estimate two linear probability models (LPMs). In one, we regress a binary indicator for whether officials replied on a binary indicator for whether officials received an email from a female student and measures of the elected official’s gender, age, and level of office. We also include fixed effects for the day we sent emails. In the other model, we include the same independent variables but use a binary indicator for whether officials provided...
Figure 1. Responsiveness. [This figure looks highly pixelated. Is this because a low-resolution version was used for the proofs but a higher-resolution one will be used later? Please let us know if we need to send a new figure.]

Note: Plotted points represent estimated coefficients, thin lines denote 90% confidence intervals, and thick lines indicate 95% confidence intervals.

a helpful reply as the dependent variable. Since we estimate LPMs, we might be concerned that the error terms are heteroskedastic, so we use robust standard errors to make inferences. Figure 1 presents the results of these models. Plotted points represent estimated coefficients, thin lines denote 90% confidence intervals, and thick lines indicate 95% confidence intervals. The figure shows that we cannot reject the null hypotheses that elected officials treated male and female students the same.

The key takeaway is that there appears to be no gender discrimination, on average, either with respect to the probability of receiving a reply or receiving a helpful response. Nor is there any evidence that the treatment effects vary with the gender of the elected official or their level of office. In other words, it does not seem that female students face a disadvantage in receiving political advice from elected officials in New Zealand.

We now have three experimental studies in three different contexts, all showing that, at least in 2018, elected officials are equally encouraging of both male and female political aspirants. To the extent that mentorship, and perceptions about how welcoming the political environment might be, may matter more for women than for men, the fact that they are not discouraged but are rather equally encouraged, is good news.

When their study came out, Kalla et al. suggested that sharing their findings might ‘modify the narratives women consider when entering politics and increase the number of women that act as political selfstarters’ (Kalla, Rosenbluth, and Teele 2018, 841) That is, it might be the case that our conventional wisdom about the extent to which the deck is stacked against women candidates is no longer entirely accurate. This fits with one of the conclusions of a recent book by Hayes and Lawless, namely that the conventional wisdom that female candidates in the United States are disadvantaged by voter attitudes (as well as by media coverage and fundraising) is no longer accurate and is ‘rooted in an outdated conception of the electoral environment’ (Hayes and Lawless 2016, 6).

5. Conclusion

In summary, scholars have long been examining the role gender plays in politics, and attention to this topic is growing across different areas of political science. The empirical
facts that drive questions about gender and politics are things like the percentage of women in national legislatures; the overrepresentation of men, and the underrepresentation of women, jumps out as something to be explained. If distortions in the representation process (Krook and Norris 2014) are blocking some people from engaging in politics, then we should figure out how to remedy this. To do so, we need to know if discrimination is playing a role, and if so, where and how? If we misunderstand the source of the distortion, then our possible solutions might not do much good. They might even create new problems.

An important challenge identified in the literature is that women are not competing in elections at the same rates as men. If women anticipate facing more discrimination from parties or voters than a male candidate would, they might be somewhat more skeptical about launching a campaign. We do not know to what extent, or in what contexts, consideration of such barriers affects initial decisions to run. Thus it is important to think about the representation process as a whole, and how distortions at one stage might have effects not only for what happens at later stages, but what happens at earlier ones as well. Most of the literature focuses on the choices of voters and parties, and we know less about the conditions under which women are likely to run for public office.

This may be where we need to spend more time, as researchers. And we need to use a wide variety of methodological approaches. We should take advantage of observational data, though we need to think carefully about the data-generating process that produces them, and what inferences we can draw from them. It is important to gather qualitative data and talk to men and women who do run for office, as well as those who might have run but did not. In addition, we need normative theory accounts discussing why, or under what conditions, gender parity in politics matters for representation. And coming up with creative ways to use experimental approaches is one of the areas that might yield important insights in the near future. If we do not develop a better understanding of the representative process, and the ways in which it can be biased, then we cannot fix it.

Thinking about gender and representation should be part of a broader project of thinking about representation with respect to different groups that we find relevant for politics. Much of this discussion about gender will hold for other identity characteristics, such as ethnicity, national origin, religion, language, and so on. Earlier, we mentioned a newly-elected Native American Congresswoman and her comments on being a role model for future Native women running for office. Congresswoman Haaland was suggesting that advice from someone who shares certain identity characteristics and, thus, would likely also share certain experiences, would have made both her decision to compete and the campaigning process itself easier. We would suggest that her identity as a Native American will be relevant for Native American men as well. Voters and their representatives have multiple identities that can be politically relevant. As we investigate the conditions under which women (or other under-represented groups) are willing to compete, we should be thinking about what factors are going to be effective at encouraging them to run for office as well as those that discourage this kind of political participation. Maybe having the encouragement of your party always helps, and maybe it helps even more when you do not have many role models in office already.
Notes

1. We thank Matt Golder, two anonymous reviewers, and the editors for extremely useful feedback. The University of Michigan’s Institutional Review Board approved this study (HUM00153767). We pre-registered the study’s design and our analytical strategy at Open Science Framework (https://osf.io/gwksf/?view_only=b2f06cb2bc284cec8b8c35170d200add). The data that support the findings will be available on the Harvard Dataverse upon publication.

2. In this paper, we talk about gender in terms of men and women. Although gender is distinct from biological sex, and gender as a concept is socially constructed and not dichotomous, the studies we will draw upon generally focus on men and women, and explicitly or implicitly treat gender and sex as collinear for the purposes of their research goals.

3. Interestingly, the average percentage of female legislators in democracies is only slightly higher than the average percentage of female legislators in dictatorships. In only three countries – Rwanda, Cuba, and Bolivia – do women comprise more than half of the legislators.

4. Existing work examining why women are underrepresented in politics highlights multiple stages of the representation process during which discrimination might occur. In this paper, we focus on the role that parties can play in encouraging potential political aspirants. Specifically, we conduct a field experiment in New Zealand to evaluate whether elected officials are equally responsive to female and male political aspirants.

5. Montgomery, Nyhan, and Torres (2018) provide a good introduction to post-treatment bias and how researchers can potentially avoid it.

6. This discussion draws heavily on Gaddis (2018).

7. We did not include members of the various local boards, contacting only members of municipal councils. We excluded national-level politicians who were also members of the government. We provide additional sample details in Appendix A.

8. The emails would appear to be only from students of European descent, rather than from students with Māori, Pasifika, or Asian backgrounds.

9. Another benefit of using a smaller number of names is that it also allowed us to maximize statistical power.

10. Feedback from colleagues at the 2018 New Zealand Political Studies Association annual conference suggested that we should have modified the original language of the email to say ‘course’ rather than ‘class’. Additionally, multiple scholars claimed that the text of the email was, in their experience, unusually polite and formal compared to the correspondence they typically receive from students.

11. We did not collect other information about the officials. We provide more descriptive statistics for these pre-treatment covariates in Appendix A, but in brief, the mean age of the officials in our sample was 53, 32% were women, and 90% were officials holding subnational offices.

12. Like other audit studies, we cannot tell if the officials in our sample receive and reply to our emails or if staff do so instead. As a result, our unit of analysis is the office of the official and not the official herself.

13. To be able to examine the effects of these pre-treatment characteristics as efficiently as possible, we block-randomized on gender, level of office, and age (Moore and Schnakenberg 2012). This means that we divided the officials into four groups, each with the same mixture of gender, level of office, and estimated ages. Then two of these groups received emails from women and the other two from men. This approach allows us to minimize the effect of age, level, or gender of the recipients across the treatments on rates of response.

14. We had intended to collected data on response rates as well as quality of response within a two-week period. Due to technical problems with the email provider, we were only able to collect data on responses for up to a week for the earliest messages, and at least three days for the latest messages. Note that evidence from this kind of correspondence study
suggests that most people will respond within 48 hours, if they are going to respond at all (Costa 2017; Hughes et al. 2018).

15. An LPM is preferable to a logit or probit model because it provides an unbiased estimate of the average treatment effect and is easier to interpret (Lin 2013; Judkins and Porter 2016).

16. Emails were delivered over a three-day period, spanning Wednesday-Friday.

17. We present tabular results in Appendix B.

18. We obtain similar results with a wide range of analyses, such as difference of proportion tests (Appendix C), logit models (Appendix D), and randomization inference tests (Appendix E).

19. To determine this, we re-estimated the LPMs described above but interacted the gender treatment indicator with a measure of (a) official gender and (b) official level of office. The interaction terms from these models were not statistically significant, suggesting that elected officials treated male and female students similarly, regardless of whether the officials were men or women, or occupied national or subnational office.

Disclosure statement

No potential conflict of interest was reported by the authors.

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