Risky Business: Gender Stereotype Attacks in Primary Elections

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Abstract: Although the landscape for female candidates in U.S. politics has improved, research suggests that gender stereotypes still pose significant obstacles for women in primary elections. But our understanding of this dynamic is limited because studies have not applied the classical theoretical model of persuasion to examine how the content of stereotype-based attacks in primary campaigns interacts with voter attitudes to shape support for female candidates. Applying this framework, we show in two experiments that regardless of whether a male candidate invokes gender stereotypes implicitly or explicitly, the attack generally backfires and increases support for his female opponent. This occurs in both Republican and Democratic primaries, but the backlash is strongest among Democrats, whose predispositions about gender equality lead them to reject stereotype attacks strongly. On the whole, gender stereotyping appears to be a risky business for male candidates, which may account for why few of them pursue such a strategy.

Whether women navigate more difficult electoral terrain when they run for office remains an unsettled question. On one hand, the landscape for women in American politics has improved dramatically in recent decades. Women raise as much money and are just as likely to win their races as men (Burrell 2014; Fox 2018; Lawless and Pearson 2008). On the campaign trail, the news media tend to cover male and female candidates similarly (Hayes and Lawless 2015; 2016). And political operatives have grown increasingly amenable to recruiting women to run for office (Fox and Lawless 2010; Karpowitz, Monson, and Preece 2017; Lawless and Fox 2017).

On the other hand, journalists regularly suggest that women have to "work harder" to prove their qualifications;[1] that it's more difficult for women to appear "likable;"[2] and that voters "tend to support a male candidate they don't like as long as they think he's qualified."[3] Female candidates often sound the same refrain, explaining that they are held to a "totally different"[4] standard and have to "prove [them]selves more."[5] Even if women aren't less likely than men to win elections, they may have to overcome obstacles on the campaign trail that men don't.

Gender stereotypes may be one such obstacle, but here, too, the existing scholarship has not reached consensus. A long line of research argues that stereotypes are a significant impediment. Voters view women as political leaders only reluctantly, believe they are poorly suited to handle key issues, and generally prefer to elect men (e.g., Fulton 2012; Sanbonmatsu 2002; Schneider and Bos

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[1] Danielle Kurtzleben, "Do Women Candidates Have an Advantage in 2018?" *National Public Radio*, March 28, 2018. Accessed at: https://www.npr.org/2018/03/28/597369398/do-women-candidates-have-an-advantage-in-2018 (June 2, 2019).

[2] Kurtzleben, "Do Women Candidates Have an Advantage in 2018?"

[3] Kate Zernike, "Forget Suits. Show the Tattoo. Female Candidates Are Breaking the Rules," *New York Times*, July 14, 2018. Accessed at: https://www.nytimes.com/2018/07/14/us/politics/women-candidates-midterms.html (June 2, 2019).

[4] Ruby Cramer, "Hillary Clinton on the Demands of Campaigning: 'It's Not Easy'," *Buzzfeed*, October 11, 2015. Accessed at: http://www.buzzfeed.com/rubycramer/hillary-clinton-on-the-demands-of-campaigning-its-not-easy#.ymNODwqz9 (June 2, 2019).

[5] "Life as a Woman Politician: We Have to Work Harder. An Interview with Fiona Ma," *Silicon Valley Impressions*, February 15, 2018. Accessed at: https://www.fionama.com/news/life-as-a-woman-politician-we-have-to-work-harder (June 2, 2019).

2014; 2019). At the same time, a growing body of work suggests that partisan loyalties dominate voter decision-making; candidate sex (or any other characteristic) exerts only minimal influence on voters' attitudes (Brooks 2013; Dolan 2014; Hayes and Lawless 2016; Teele, Kalla, and Rosenbluth 2018). Still other studies identify context-dependent effects (Anzia and Bernhard 2019; Crowder-Meyer et al. 2015; Dittmar 2015; Huddy and Terkildsen 1993).

There is general agreement, however, on two propositions. First, in contests involving female candidates, gender is likely to play its strongest role when voters cannot rely on party cues (Hayes 2011; Hayes and Lawless 2016; Matland and King 2003; McDermott 1997). When partisanship is out of the equation and cannot help voters discriminate among candidates – such as in primary elections – gender is likely to be more salient. Second, gender stereotypes matter most when activated by campaign communication (Bauer 2017). Attacks by male opponents, for example, can make their way into campaign advertising or media coverage and encourage voters to rely on stereotypes about female candidates (Cassese and Holman 2018). As Lawless and Pearson (2008, 69) suggest, "Gender stereotyping may pose particular challenges for women in primaries."

This paper builds on these two assumptions and for the first time applies the classical theoretical model of persuasion (e.g., Hovland, Janis, and Kelley 1953) to study how primary voters react to gender stereotypes in campaign attacks. The model's fundamental premise is that attitude change depends on the interaction among the source of a message, its content, and the characteristics of the audience. Specifically, we examine the effect of implicit versus explicit gender stereotype attacks and whether those effects are contingent on voters' attitudes about gender discrimination in U.S. society. One benefit of our theoretical framework is that it allows for the possibility that invoking gender stereotypes in some circumstances can backfire against male candidates, especially among certain segments of the electorate.

In two national survey experiments, we find no evidence that women are harmed by campaign messages that invoke gender stereotypes. More often, the attacking male candidate suffers a backlash. In Democratic and Republican primaries alike, both explicit and implicit stereotype attacks give the female opponent an electoral boost. The effect is largest when an attack is explicit and in a Democratic primary, where voters express high levels of concern about gender discrimination in society. Our results underscore that the impact of gendered campaign communication depends on both the specific content of the message and voters' pre-existing attitudes. On the whole, gender stereotyping attacks appear to be a risky business for male candidates, which may account for why few of them pursue such a strategy.

Gender Stereotype Attacks and the Model of Persuasion

The basic tenets of the classical model of persuasion (e.g., Hovland, Janis, and Kelley 1953; McGuire 1968) underlie most contemporary research on political behavior, including campaigns and elections. People's attitudes about candidates are presumed to emerge from a combination of the information they are exposed to during an election and their prior beliefs (e.g., Zaller 1992). The core insight is that "campaign messages … work their influence in concert with voters' prevailing predispositions and sentiments" (Iyengar and Simon 2000, 158).

Despite this well-known premise, no work has applied this framework to the study of gender stereotypes in primary campaigns. Instead, scholars take different approaches. Some assess women's win rates in primaries as a way to identify potential disadvantages or bias (e.g., Thomsen 2019; Lawless and Pearson 2008). Others show how latent gender stereotypes among voters influence attitudes about female primary candidates (e.g., Matland and King 2003). And one recent study finds that stereotype attacks by a male opponent in a primary can have different effects depending on the female candidate's party affiliation (Cassese and Holman 2018). But without a simultaneous

consideration of both campaign messages *and* voters' key predispositions, we cannot fully determine how gender stereotype attacks actually affect support for women in primaries.

Message Content

We begin with a consideration of the content of campaign messages. Although gender stereotype attacks by male candidates can have multiple dimensions, the racial priming literature suggests a critical distinction between implicit and explicit attacks. Implicit messages – those that tap into stereotypes without violating the widely embraced principle of equality – have been shown to be more effective than explicitly racial language (e.g., Mendelberg 2001; Valentino, Hutchings, and White 2002). Explicit messages, which make direct reference to a group, violate social norms and can lead people to reject what might easily be interpreted as racism (Hutchings and Jardina 2009; though see Banks and Hicks 2018; Valentino, Neuner, and Vandenbroek 2018).

By the same logic, campaign attacks that implicitly invoke gender stereotypes may activate some voters' qualms about women in politics (Eagly and Karau 2002; Mo 2015) without forcing them to embrace overtly discriminatory messages. For instance, criticizing a female candidate for being insufficiently tough may make reservations about women's leadership abilities more salient for voters (e.g., Lawless 2004). But as long as the message is ostensibly only about leadership – not the fact that the candidate is a woman – voters may not perceive it as a gender attack. Stereotype-related messages thus could be most damaging to female candidates when they are implicit, or plausibly not related to gender.

But even an implicit attack may pose a risk for a male candidate. Messages met with hostility can generate backlash, moving opinion in the opposite direction than intended (Hovland, Lumsdaine, and Sheffield, 1949). Indeed, this is the foundation for work on negative advertising that shows voters often dislike it when candidates criticize each other (Brooks and Murov 2012; Lau, Sigelman, and Rovner 2007). Attacking candidates are at risk when voters think the criticisms are

irrelevant, uncivil, or violate social norms in some fundamental way (e.g., Kahn and Kenney 2019; Lau and Rovner 2009; Mattes and Redlawsk 2014). The odds of backlash may increase when female candidates frame their opponents' attacks this way. By calling out gender stereotyping messages as sexist or counter-attacking on some other dimension (see Tokeshi and Mendelberg 2015), women may be able to dampen the attacks' effect, "neutralizing the cumulative effects of the stereotypes" (Cassese and Holman 2018, 805). This could drive down a male candidate's support as much as his female opponent's, if not more.

Voters' Predispositions

The way voters react to a gender stereotype attack – embracing or rejecting it – will likely depend on their pre-existing beliefs. In general elections, a motivated reasoning perspective (Taber and Lodge 2006) predicts that voters' assessments of a campaign attack will depend heavily on the attacking candidate's partisanship. Voters will look charitably on messages from their own party's candidate and view skeptically the opposing candidate's attacks. But in primaries, where partisanship doesn't vary and ideological differences among candidates are rare, that (subconscious) party cue is not available. Other predispositions, then, will be influential.

Among the most relevant of these predispositions in primaries involving male and female candidates will be voters' views of gender discrimination in U.S. society. That's because the extent to which voters see inequality more broadly may moderate their reactions to gender stereotyping attacks. At a time when gender and politics are highly entwined – look no further than the 2016 presidential campaign, women's activism in reaction to Donald Trump, and the #MeToo movement – attitudes about gender are likely to be chronically salient for voters who see significant discrimination in politics and society. Attuned to inequalities that underlie women's under-representation in politics, those individuals may identify stereotype attacks on a female candidate – especially those that are explicit – as unfair or sexist. Voters less worried about gender inequality,

either because they see little evidence of discrimination in society or politics or because they themselves hold hostile attitudes about women, are less likely to react unfavorably to gender stereotypic messages, especially implicit attacks that could plausibly be read as unrelated to gender.

One implication of this perspective is that the effect of these attacks should vary based on whether they occur in a Democratic or Republican primary. Surveys show that Democrats are more than twice as likely as Republicans to say that society needs to do more to bring about gender equality.[6] Similar partisan differences emerge when it comes to concern about sexual harassment in the workplace.[7] It follows that Democrats are significantly more likely than Republicans to say it's important to elect more women to political office (Dolan 2010)[8] and to believe that gender discrimination is a major reason there aren't more women in politics (see Dolan and Hansen 2018; Hayes and Lawless 2016).[9] This does not mean blind loyalty to any female candidate when a male candidate attacks her in a Democratic primary. Nor does it suggest that gender attacks will never backfire among Republicans. But on average, gender stereotype attacks, particularly explicit ones, should be least effective in Democratic primaries, where more voters are concerned about gender inequality.

Ultimately, our theoretical approach suggests that the effect of a gender stereotyping attack will depend on its content (implicit versus explicit) and the audience at whom it is directed (who possess varying predispositions about gender discrimination). Considering the efficacy of gendered

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[6] Juliana Menasce Horowitz, Kim Parker, and Renee Stepler, "Wide Partisan Gaps in U.S. over How Far the Country Has Come on Gender Equality," *Pew Research Center*, October 18, 2017. Accessed at: https://www.pewsocialtrends.org/2017/10/18/wide-partisan-gaps-in-u-s-over-how-far-the-country-has-come-on-gender-equality/ (June 1, 2019).

[7] Nikki Graf, "Sexual Harassment at Work in the Era of #MeToo," *Pew Research Center*, April 4, 2018. Accessed at: https://www.pewsocialtrends.org/2018/04/04/sexual-harassment-at-work-in-the-era-of-metoo/ (June 1, 2019).

[8] Jennifer De Pinto, "Women Think U.S. Would Be Better Off with More Women in Office," *CBS News*, January 19, 2018. Accessed at: https://www.cbsnews.com/news/women-think-u-s-would-be-better-off-with-more-women-in-office-cbs-news-poll/ (June 1, 2019).

[9] "Poll: Major Gaps of Views on Women in Politics by Gender, Party Affiliation," *NBC News*, September 20, 2018. Accessed at: https://www.nbcnews.com/card/poll-major-gaps-views-women-politics-gender-party-affiliation-n911211 (June 1, 2019).

attacks this way can tell us about the circumstances under which the activation of gender stereotypes might be most consequential for female candidates in primary elections.

Experimental Design

We examine the way that campaign messages and voters' predispositions shape the effectiveness of gendered attacks using two survey experiments – the first from September 2016 with a sample of 1,120 respondents recruited via Mechanical Turk (Study 1),[10] and the second from June 2018 with a sample of 2,266 respondents through the survey firm Lucid (Study 2).[11] Both began with a short survey that collected basic demographic information from the respondents, including their partisan affiliation (see Table A1 for a description of the samples). We then asked a battery of questions to measure respondents' attitudes about the prevalence of gender discrimination and their perceptions of women's equality. The pre-survey concluded with a few distraction questions as palate cleansers.[12]

Following the brief survey, we exposed the subjects to what looked like an excerpt from a typical newspaper article about two state legislative candidates running in their party's primary in

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[10] This service provides people with small payments (in our case $1) for participating in academic surveys or market research. While methodological concerns about online experiments remain, Mechanical Turk samples are more demographically representative than are the convenience samples of undergraduate students that are typical for political science research (Berinsky, Huber, and Lenz 2012). Accordingly, MTurk has become a common method by which to conduct experiments in political science (e.g., Arceneaux 2012; Huber and Paris 2013). For more information on Mechanical Turk, see: https://www.mturk.com/mturk/welcome. Although our sample is somewhat more Democratic and liberal, more educated, and younger than the 2016 American National Election Studies sample (see Table A1), the results of our MTurk study are virtually identical to our findings from our second study, where our Lucid sample matches the ANES very closely. This suggests that any peculiarities of the MTurk sample are not responsible for our findings.

[11] Lucid draws its sample from other survey firms' panel respondents (i.e., SSI, Qualtrics). All respondents are U.S. residents who are at least 18 years old. Demographic and experimental findings on Lucid have been shown to track well with national benchmarks (Coppock and McClellan 2018).

[12] In Study 1, the distraction items asked for additional demographic information (sex, age, race, state). In Study 2, we included a battery of Big 5 questions, which asked respondents to indicate how well several pairs of traits described them. See Appendix A for the pre-exposure surveys.

another state.[13] In the story, which we wrote, respondents read that Martin Simpson and Deborah Reeves, described as professionals who both previously held local office, were "locked in a tight battle."[14] Republican respondents (including leaners) read articles that described both candidates as Republicans. Democratic respondents (including leaners) read articles that described the candidates as Democrats. Pure independents were randomly assigned to one party's primary.[15] This allows us to examine the way respondents evaluate male and female candidates in an environment where partisanship doesn't help them choose.

We then randomly assigned subjects to one of 10 conditions. Those assigned to the control group read nothing beyond the race recap and basic background information about the candidates. Respondents assigned to the remaining nine conditions read the recap and background information, as well as a quote in which Simpson expressed doubts that Reeves would do a good job representing the district. We varied the content of the news article on two dimensions. First, we manipulated whether Simpson criticized Reeves with an explicit, implicit, or non-gendered attack. Second, we varied Reeves' response. She either didn't respond, responded by calling out Simpson for sexism, or responded by changing the subject and accusing Simpson of being bought by special interests.

In the Explicit conditions, Simpson linked his concerns about Reeves to her sex. In Study 1, Simpson said: "She's a woman, and that's the only reason she's doing as well as she is. I think she's not qualified." In Study 2, we quoted Simpson saying this: "As a woman, she's just not tough enough to get the job done." We focus on qualifications and toughness because both attributes are central to the political science research on gender stereotypes (e.g., Huddy and Capelos 2002; Lawless 2004; Schneider and Bos 2014). Although uncommon, Simpson's language in both cases

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[13] In Study 1, respondents were told the race was in Wisconsin; in Study 2, they were told the race was in Delaware. The results are the same if we drop respondents from those states, so we include them as part of the sample.
[14] In Study 1, we randomized the male and female candidates' occupations (attorney versus professor) and the previous political offices they held (city council versus county commission). It made no difference.
[15] None of our conclusions is different when we restrict the analysis to avowed partisans.

reflects the way explicit gender attacks occasionally arise in contemporary political discourse. Aside from numerous instances from Donald Trump,[16] one example is Senate Majority Leader Mitch McConnell's characterization of his 2014 opponent, Kentucky Secretary of State Alison Lundergan Grimes. McConnell referred to her as someone who "didn't really have any qualifications at all," adding, "I don't think arguing 'vote for me because I'm a woman' is enough."[17]

The Implicit treatment was more subtle. Once again, Simpson expressed concern that Reeves would poorly represent the district's interests, either because she was unqualified or not tough enough. But he stopped short of mentioning Reeves' sex, saying only, "I think she's not qualified" (Study 1) or "She's just not tough enough to get the job done" (Study 2). Here, Simpson's remarks are intended to activate gender stereotypes without specifically making reference to the fact that Reeves is a woman. This is similar to language sometimes used by candidates in legislative campaigns. In 2018, former Nevada Republican Senator Dean Heller called his (ultimately victorious) female opponent "Weak Jacky Rosen"[18] and claimed in a press release that "Jacky Rosen is Weak on Iran."[19]

Finally, respondents in the Non-Gendered condition read that Simpson thought Reeves would not do a good job either because "she's bought by, and will be accountable to, the big money donors paying for her campaign" (Study 1), or because "she just doesn't share the values of the people of this district" (Study 2).[20] Because the criticism is not connected to traditional gender

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[16] Libby Nelson, "Donald Trump Says Women Don't Like Hillary Clinton. They Dislike Him Even More," *Vox.com*, April 26, 2016. Accessed at: https://www.vox.com/2016/4/26/11514948/trump-clinton-women (June 2, 2019).

[17] "McConnell: Grimes Qualifications Not Good Enough for Senate," *NBC News*, August 4, 2014. Accessed at: https://www.nbcnews.com/video/mcconnell-grimes-qualifications-not-good-enough-for-senate-314867267654 (June 1, 2019).

[18] "ICYMI: Weak Jacky Rosen Caught Failing Again," www.deanheller.com, May 14, 2018. Accessed at: https://www.deanheller.com/icymi-weak-jacky-rosen-caught-failing/ (October 14, 2018).

[19] "Jacky Rosen Is Weak on Iran," www.deanheller.com, May 8, 2018. Accessed at: https://www.deanheller.com/jacky-rosen-weak-iran/ (October 14, 2018).

[20] See Appendix B for the full text of each condition.

stereotypes, this condition allows us to determine whether any effects we uncover are driven by the use of gender stereotypes or simply by attacks in general.

Each of these three treatments – Explicit, Implicit, or Non-Gendered – was accompanied in the news story by a version of Reeves' response (or lack thereof). Some respondents read a story in which Reeves did not respond at all. Others saw an article in which Reeves' campaign issued a statement saying that Simpson's criticism "smacks of sexism" and that voters "deserve a campaign that doesn't involve attacking women's qualifications" (or "toughness"). The remainder read a story in which Reeves did not call Simpson's remarks sexist, but instead counter-attacked by criticizing him for being "beholden to the special interests that are funding his campaign." These variations add a measure of external validity to the study, since rarely do candidates allow direct criticism (especially explicitly sexist commentary) to go unchallenged.[21] They also allow us to test the possibility that female candidates' responses moderate the effect of gender stereotype attacks.

After reading the article, we asked respondents to rate the favorability of the candidates, as well as their perceptions of the candidates' qualifications or toughness, how sexist each candidate is, and the degree to which the candidates' embody a variety of other traits (see Appendix C). Our analytical strategy is to compare movement in net support (comparing Reeves to Simpson), since we are interested not just in whether favorability toward the female candidate decreases, but whether it decreases more (or less) than it does for the man who attacks her.

Before turning to the results, we should note that we designed the experiment around a news article reporting on one candidate attacking another for three reasons. First, the way voters most often encounter information about candidates in down-ballot elections is to read about them in local media outlets (Graber 2010). Second, although news organizations occasionally inject gender into

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[21] Emma Newburger, "Female Candidates Are Calling Out Sexism More Aggressively on the Campaign Trail," *CNBC.com*, September 27, 2018. Accessed at: https://www.cnbc.com/2018/09/27/female-candidates-are-more-aggressive-about-tackling-gender-based-attacks-in-2018-election.html (June 2, 2019).

their coverage without being prompted, most gendered content – especially outside of presidential campaigns – stems from what the candidates themselves have said or done (Hayes and Lawless 2016). Third, as noted above, we modeled the content of the explicit and implicit gender attacks on the substance and language actual male candidates have used when criticizing their female opponents. Thus, our research design allows us to examine in a realistic way how campaign attacks affect citizens' impressions of the candidates launching them and those on the receiving end.

Backlash against Gender Stereotyping Attacks

We begin our analysis by examining baseline attitudes about Martin Simpson and Deborah Reeves. Because respondents in the control condition received relatively little information about the two candidates, their ratings on the 0 to 10 favorability scale tell us whether there is a default preference in our sample for male or female candidates. In the Democratic primary, we find a small advantage for Reeves. In Study 1, voters gave her an average rating of 6.4, compared to a 6.1 for Simpson (p = 0.11). In Study 2, Reeves benefited from a 0.4 point advantage (a 6.2 average rating, compared to Simpson's 5.8; p < .05). On the Republican side in both studies, we find no statistical difference in the average ratings for Simpson and Reeves.[22] These results – a slight Democratic preference for female candidates and no preference among Republicans – are consistent with other recent work (e.g., Kirkland and Coppock 2018; Schwarz, Hunt, and Coppock 2018). Importantly, they also suggest no strong anti- or pro-woman bias in the absence of other information.

Figure 1 presents the effects of the main experimental treatments: the explicit, implicit, and non-gendered attacks on Reeves. For each treatment, we display net favorability – Reeves' advantage over Simpson – as a difference from the control group.[23] Scores above zero mean that Reeves'

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[22] In Study 1, the average Republican control condition rating was 6.2 for Simpson and 6.1 for Reeves (p = 0.75). In Study 2, it was 6.2 for Simpson and 6.3 for Reeves (p = 0.58).

[23] Tables A2 and A3 display the average favorability scores for each candidate in each treatment.

advantage over Simpson was higher than in the control, indicating that Simpson's attack helped

Reeves more than it hurt. Scores below zero reflect an advantage for Simpson, suggesting that the

attack succeeded. Because the results of both studies are very similar, we display them side-by-side.

For the moment, we ignore any variation produced by Reeves' response and present the treatment

effects only for the main conditions.

The top two panels in Figure 1 display the results in the Democratic primary. The graphs

show unequivocally that the gender stereotype attack, whether explicit or implicit, did not hurt

Reeves' standing relative to Simpson's. In fact, it helped. In Study 1, Simpson criticized Reeves as

"not qualified." Yet Reeves' net favorability rating was 3.4 points higher among respondents

exposed to the Explicit treatment and 1.6 points higher among those assigned to the Implicit

condition than it was among subjects in the control group. The findings from Study 2, where

Simpson criticized Reeves as "not tough enough," are similar, albeit slightly smaller in magnitude.

These backlash effects are significantly larger than those emerging from the non-gendered attack (p

< .05 in all cases), where Simpson criticizes Reeves for being "bought by special interests" (Study 1)

or says she "doesn't share the values" of the district's voters (Study 2). Those criticisms produce no

significant effect in Study 1 and only a small effect in Study 2.

In the Republican primary (the bottom two panels of Figure 1), the dynamic is similar,

although a bit less pronounced. In both studies, Simpson's explicit gender attack on Reeves ("As a

woman…") produces a sizeable backlash that boosts her standing. The same is true for the implicit

attack in Study 2. And although the implicit attack in Study 1 does not produce a backlash, it also

does nothing to harm Reeves. The non-gendered attacks produce no significant effect in either

study.[24]

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[24] Although we focus on favorability rather than vote choice, the comparative nature of our survey measure –
respondents rated Simpson and Reeves side-by-side – allows us to reverse-engineer a vote choice item. We assume that
respondents who gave Reeves a higher favorability score than Simpson would vote for Reeves, and vice versa for those

Figure 1. Main Effects of Explicit, Implicit, and Non-Gendered Campaign Attacks
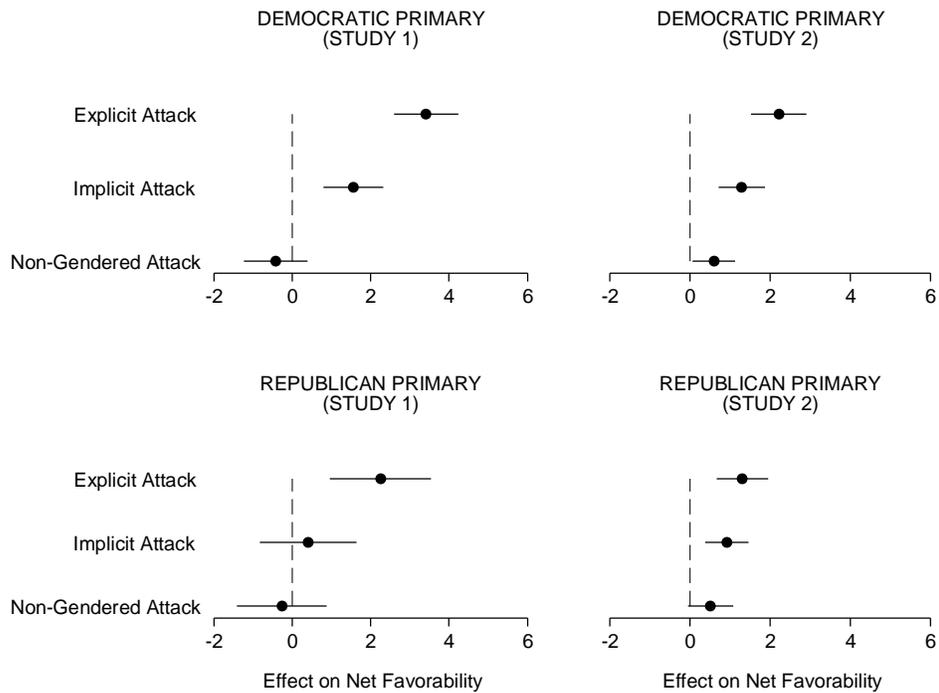
Note: Estimates present differences in mean net favorability from the control (with 95% confidence intervals). Scores above zero indicate an advantage for the female candidate, Deborah Reeves. Samples sizes: Study 1, Democratic Primary = 744; Study 2, Democratic Primary = 1,233; Study 1, Republican Primary = 376; Study 2, Republican Primary = 1,012.

These results point to two initial conclusions. First, gender stereotype attacks by a male opponent don't hurt female candidates; they may actually help. In seven of the eight gendered treatments across the two studies, Reeves gains an advantage following Simpson's attack. Second, the evidence suggests that backlash effects occur only insofar as they are connected to gender stereotypes. In both primaries, movement in the Non-Gendered condition is either small or non-existent, meaning Simpson paid virtually no price for criticizing Reeves as being bought by special interests or failing to share voters' values. Voters do not necessarily regard male candidates' criticism of female candidates as inappropriate. But they react unfavorably to criticism that can be interpreted as gendered.

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who scored Simpson higher than Reeves. Using that measure, we replicate our favorability findings: the gender stereotype attacks never cost Reeves votes, but they do produce backlash against Simpson in both parties' primaries.

Although we expected Reeves' response to moderate the effect of Simpson's attack, it didn't (see Figure A1). Across both studies in both parties' primaries, the response had a statistically significant effect in only two cases.[25] But even then, the substantive effects were small compared to the movement produced by variation in Simpson's attack. Ultimately, respondents' attitudes were driven almost exclusively by the attack itself, not the response. Thus, we focus in the rest of the analysis only on the main treatment effects.

The Roots of the Backlash

The backlash that produces Reeves' favorability advantage stems from two factors: (1) Gender stereotyping attacks do little to diminish respondents' views of her qualifications or toughness; and (2) Gender attacks increase respondents' perceptions that Simpson is sexist. Figure 2 presents assessments of Simpson and Reeves' positive attributes, on scales ranging from 0 to 10 for each trait. The graphs display differences from the control group – i.e., treatment effects – for how well the word "qualified" (Study 1) or "tough" (Study 2) describes each candidate. Unlike in Figure 1, these are not net evaluations. Here, in an effort to identify the mechanisms that lead to the backlash effects, we want to observe assessments of each candidate's attributes separately.

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[25] In Study 1, in the Implicit treatment in the Republican primary, when Reeves changes the subject, she nets a higher favorability score than when she does not respond. In Study 2, in the Explicit treatment in the Democratic primary, the Sexism response is more effective for Reeves than either the No Response or the Change Subject response.

Figure 2. Treatment Effects on Evaluations of Candidates' Qualifications and Toughness
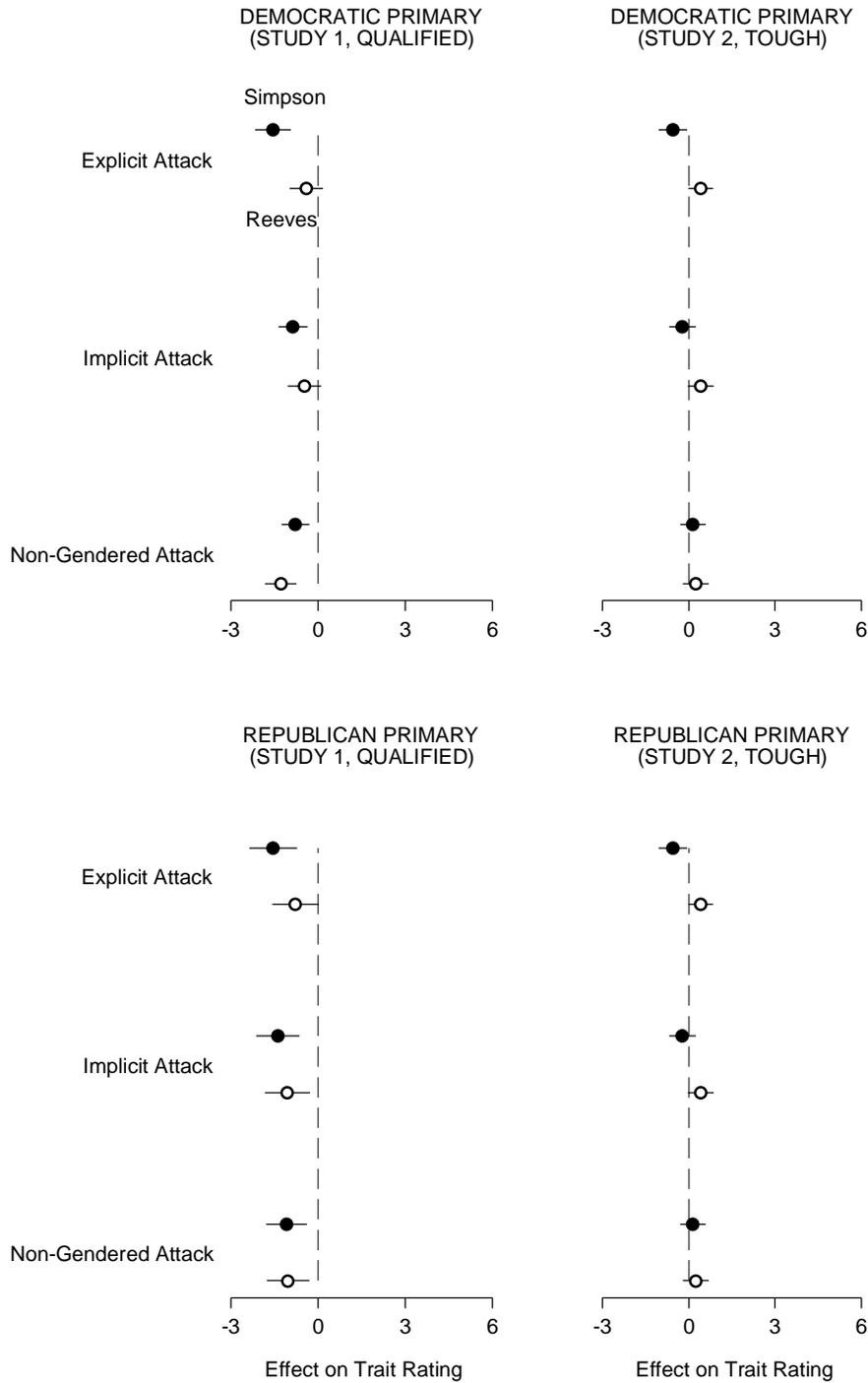
Note: Estimates present differences in the mean qualifications (Study 1) or toughness (Study 2) rating from the control (with 95% confidence intervals) for each candidate. Samples sizes for each primary in each study appear in Tables A4–7.

If Simpson's attacks had the intended effect, we would observe two patterns. First, assessments of Reeves' qualifications or toughness would suffer as compared to the control group. So they would be negative, appearing to the left of the zero-line in the Explicit and Implicit conditions. Second, Simpson's own ratings on these positive attributes would remain unaffected, or at least decline less than Reeves'. That combination would suggest that Simpson's attacks are doing more damage to his opponent than to him.

But there is minimal evidence of either pattern. In the Democratic primary, Simpson's gender stereotype attacks never significantly reduce respondents' ratings of Reeves' qualifications or toughness. In the Republican primary, Reeves' qualifications rating in Study 1 takes a statistically significant hit from the implicit attack and a marginally significant one from the explicit attack (p= .06). But in Study 2, neither has any effect. Perhaps more importantly, there is no case where voters' assessments of Simpson's own qualifications and toughness are more positive than their evaluations of Reeves. Even when Simpson manages to raise doubts about Reeves, his own ratings fall as much or more. And that backlash tends to be bigger when the attacks are gendered, either implicitly or explicitly.

But it's not just Simpson's positive attributes that take a hit. His attacks also lead voters to evaluate him as sexist. Figure 3 displays treatment effects on ratings of how well "sexist" describes the two candidates (higher ratings a bad thing in these graphs). In the Explicit and Implicit treatment for both studies in both parties, Simpson's sexism rating goes up – sometimes substantially so. It also goes up in the Non-Gendered condition, but those effects are smaller.[26]

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[26] In the Democratic primary in both studies, the effect of both the Explicit and Implicit treatments on Simpson's sexism rating is larger than the effect in the Non-Gendered condition (all comparisons p < .05). In the Republican primary in both studies, the Explicit treatment effect is larger than the Non-Gendered effect (p < .05), but the Implicit and Non-Gendered effects are not different from each other.

Figure 3. Treatment Effects on Evaluations of Candidates' Sexism
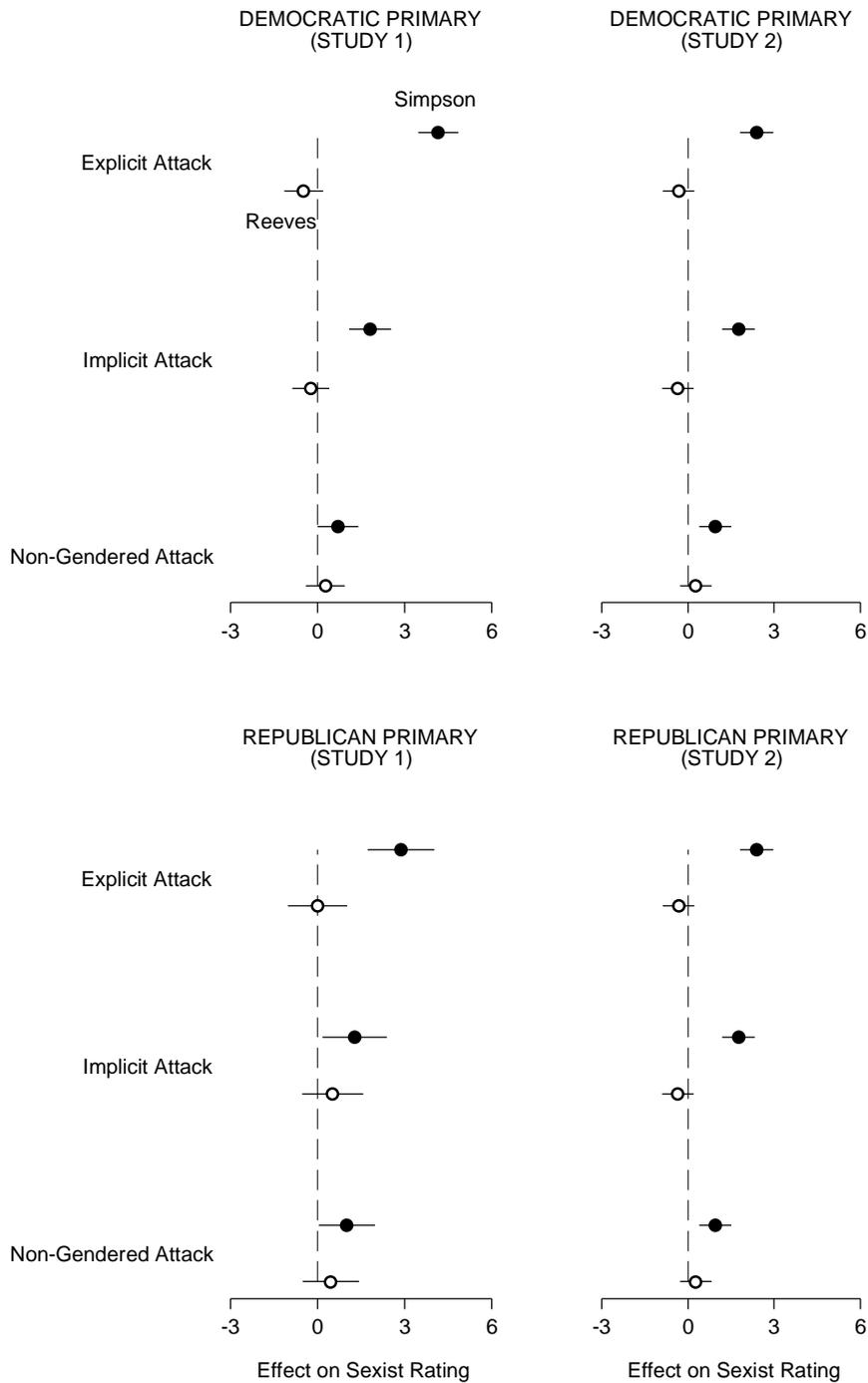
Note: Estimates present differences in the mean sexism rating from the control (with 95% confidence intervals) for each candidate. Samples sizes for each primary in each study appear in Tables A4–7.

Together, the data presented in Figures 2 and 3 explain why the gender stereotyping attacks give Reeves a favorability advantage: The explicit attack is ineffective in undermining her qualifications and toughness, and the implicit attack does at least as much harm to Simpson as it does to Reeves. Simpson is also perceived as sexist, whereas Reeves' ratings are largely unaffected on this dimension, since there's little in the experiment that would lead voters to view her that way.[27] That the Non-Gendered condition generally has small effects on Simpson's sexism ratings lends support to the contention that gendered attacks, as opposed to more generic criticisms, are particularly fraught for male candidates competing against women.[28]

Perceptions of Gender Discrimination as a Moderator

Although we've uncovered no evidence that gender stereotype attacks – regardless of whether they're explicit or implicit – harm female candidates, the content of the message is only the first of two important dimensions. The audience matters as well, and we expect that not all voters will react the same way. Individuals who don't express much concern about gender inequality may be most receptive. At the other end of the spectrum, backlash effects should presumably be largest among those who see a great deal of discrimination against women in U.S. society.

In the pre-survey, we included four questions to measure these predispositions. We asked respondents (1) how much discrimination they believe women face in the United States today; as well as the extent to which they agree that (2) discrimination against women is no longer a problem in the United States; (3) society has reached the point where women and men have equal opportunities for achievement; and (4) feminism has had a positive impact on social and political life

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[27] This is generally true even in the response conditions (see Figure A1) in which Reeves counter-attacks by calling Simpson sexist.

[28] In the Appendix (Tables A4 –A7), we present regressions for the full battery of traits included on the survey. The results confirm the patterns we present in Figures 2 and 3: Gender stereotyping attacks make respondents think Simpson is sexist while doing little to harm Reeves' reputation.

in the United States. We use these items to create an index, with higher scores reflecting more perceived gender discrimination.[29] We embedded the measures amid a variety of other survey items in an effort to reduce the possibility of priming gender attitudes before the experimental manipulation. [30]

Figure 4 presents the effects of the experimental treatments on net favorability ratings for Simpson and Reeves, broken down by whether a respondent's "perceptions of discrimination" score was above the median, or at or below the median. We present the data this way because it clearly and efficiently illustrates the moderating effect of these attitudes. When we examine responses across the full range of the variable, our substantive conclusions are the same.

In the Democratic primary in both studies, the backlash against Simpson in the Explicit and Implicit conditions is biggest among those who score high on our scale. The difference is most pronounced in the Explicit condition, where Simpson is unabashedly sexist. In the Republican primary, we find a similar, but more muted pattern. Across both studies, Republican respondents who perceive discrimination exhibit significant backlash against Simpson in the Explicit condition. In Study 2, the same is true in the GOP primary in the Implicit condition.

---

[29] We scale the measure from 0 to 1, with higher scores indicating greater perceived discrimination. In Study 1, the mean is 0.61 (standard deviation = 0.24), and in Study 2, the mean is 0.59 (standard deviation = 0.22). The scale is reasonably reliable. In Study 1, Cronbach's alpha is 0.77; in Study 2, it is 0.65. The similarity of the distribution of the measure in the two studies also suggests its reliability.

[30] We asked about perceptions of discrimination against men, Blacks, Whites, Latinos, Christians, Muslims, atheists, poor people, and immigrants. The battery of questions tapping into equality included items about race and socioeconomic status. See Appendix A. We also included distraction questions between these items and exposure to the experimental treatments as a way of minimizing the chance that respondents would evaluate Deborah Reeves more favorably than they would have otherwise. Indeed, the patterns we found in the control condition suggest that priming isn't responsible for the results. In the Democratic primary, Control respondents gave Reeves a small advantage over Martin Simpson, while they evaluated both candidates equally in the Republican primary. This is consistent with results from conjoint experiments (Kirkland and Coppock 2018) and a meta-analysis (Schwarz, Hunt, and Coppock 2018). Thus, answering the questions about gender discrimination in society didn't lead the respondents in our studies to express disproportionately favorable attitudes about Reeves. This doesn't preclude the possibility that the treatment effects were influenced by the pre-exposure questions, but there's little to suggest fundamental contamination.

Figure 4. Effects of Gendered and Non-Gendered Campaign Attacks, by Perceptions of Gender Discrimination
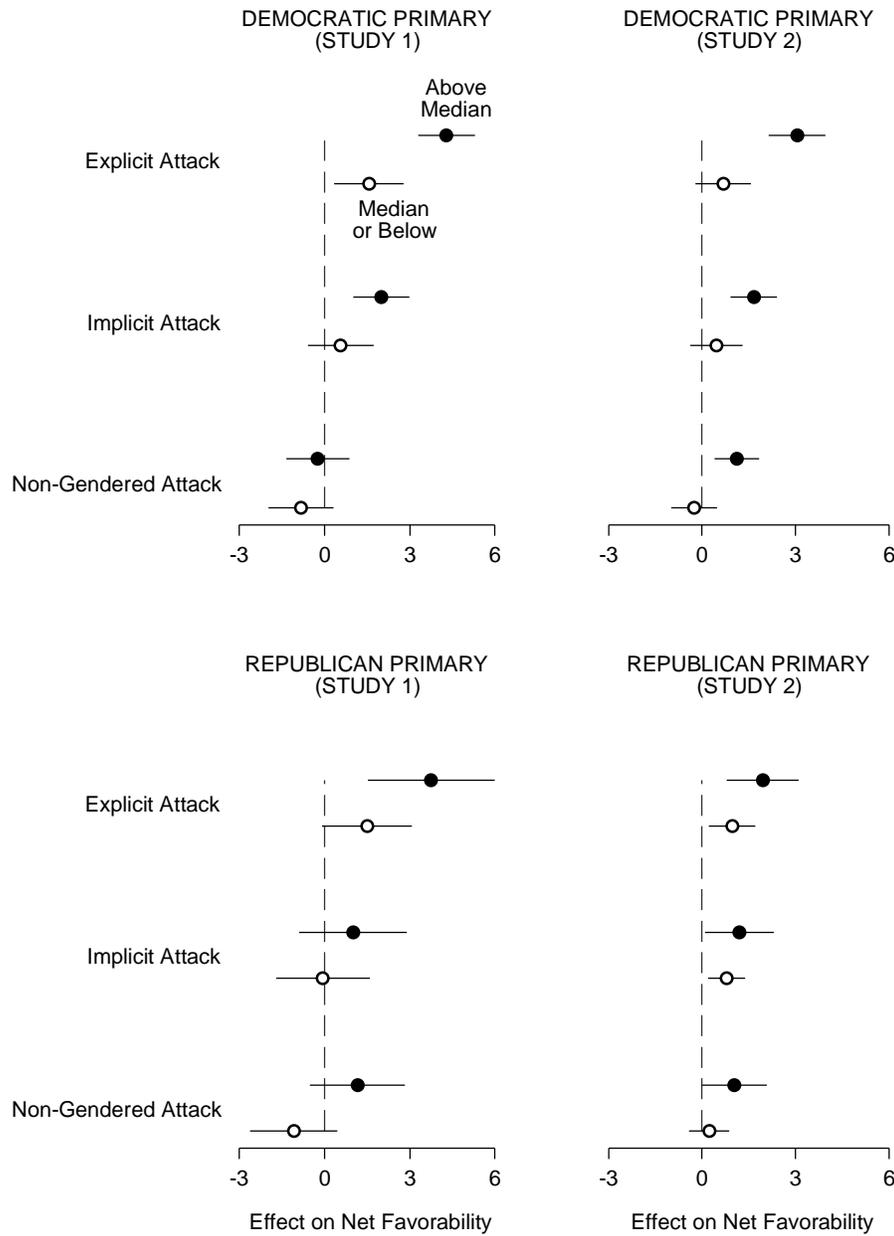
Note: Estimates present differences in mean net favorability from the control (with 95% confidence intervals), split by respondents' level of perceptions of gender discrimination. Scores above zero indicate an advantage for the female candidate, Deborah Reeves. "Above median" respondents are above the median of the gender discrimination perception scale; "Median or Below" respondents are at or below the median. Samples sizes: Study 1, Democratic Primary = 744; Study 2, Democratic Primary = 1,233; Study 1, Republican Primary = 376; Study 2, Republican Primary = 1,012.

Even those who see less gender discrimination in society, though, do not respond favorably to Simpson's attacks. In the Explicit condition, they exhibit backlash. The best Simpson does with this group is break even in the Implicit and Non-Gendered conditions. In no scenario does an attack produce a disadvantage for Reeves.[31]

The analysis explains why the overall backlash to gender attacks is more pronounced in the Democratic primary than in the Republican primary (see Figure 1). It is not because Democratic voters and Republican voters with similar attitudes about gender react differently – in fact, within the same ranges on the perceived discrimination scale, there are few (and small) differences across the parties. Instead, the party differences stem from the fact that there are fewer GOP voters who see a great deal of gender discrimination to begin with. Among Democratic primary voters, the mean "perceptions of gender discrimination" score is 0.68 in Study 1 and 0.67 in Study 2. For Republican voters, it's substantially and significantly lower (0.48 in Study 1 and 0.50 in Study 2).

One possible implication, then, is that female candidates might be vulnerable in contests with electorates that have especially little concern about gender equality. Given the correlation between self-reported ideology and perceptions of gender discrimination (0.45 in Study 1 and 0.46 in Study 2), that would presumably be Republican primaries in conservative districts. Although we don't have observational data from such elections, we can examine how the voters in our samples who were least likely to see gender discrimination in society reacted to Simpson's attacks against Reeves.

Among GOP voters in the bottom quartile of the scale, Simpson's attacks generate no backlash. But they also do not damage Reeves enough to produce a net increase in Simpson's

---

[31] In Study 1, the difference in the effects across the two groups (above the median and median or below) is statistically significant (p < .05) in four of six cases. The differences are not significant in the Non-Gendered treatment in the Democratic primary or the Implicit treatment in the Republican primary. In Study 2, the difference in effects across the two groups is significant in every case.

support. Even Republican respondents in the bottom *decile* of the perceptions of gender

discrimination scale do not respond to the attack in ways that boost Simpson's standing. These

voters are more supportive of Simpson than are others, but the gender stereotype attacks do not

enhance his support relative to Reeves.[32] We find little evidence that a female candidate faces peril as

a result of gender stereotype attacks even among particularly conservative Republican primary

voters.[33]

Discussion

As they stand, the results from our survey experiments are unequivocal: Attacks by a male

opponent that invoke gender stereotypes do nothing to harm a female candidate's electoral standing.

Voters' most common reaction is to increase their support for the woman, regardless of how she

responds. This pattern is most pronounced in a Democratic primary, but also true on the

Republican side. Our evidence suggests that the activation of gender stereotypes does not confer a

disadvantage on women running for office even when voters can't rely on party cues. Quite the

contrary. It poses a risk to male candidates who pursue a gender attack strategy. We are able to draw

these conclusions by considering both the content of candidate attacks and the relevant attributes of

voters. Identifying the true nature of campaign effects – whether gender-related or otherwise –

requires a systematic investigation of the message and the audience.

---

[32] In both studies, among Republican voters in the bottom quartile of the perceptions of discrimination scale, the effect of the Explicit treatment is positive (i.e., indicating backlash) but non-significant. The effects in the Implicit and Non-Gendered conditions were negative but non-significant. Voters in the bottom decile of the scale in Study 1 exhibit the same patterns. In Study 2, all coefficients on the treatments are positive (i.e., indicating backlash) but non-significant.

[33] A natural question is whether respondent sex – rather than attitudes about gender discrimination – is the relevant moderator of reactions to gendered attacks. We find its effect is inconsistent and less influential than perceptions of discrimination. When we run separate models for each treatment and include both the gender discrimination scale and respondent sex, respondent sex significantly (p < .05) predicts net favorability for Reeves and Simpson in only two out of six models in Study 1. The gender discrimination scale is a significant predictor in four cases. In Study 2, respondent sex again exerts a significant effect in just two models, whereas the gender discrimination variable is significant in all six.

Of course, circumspection about the scope of our findings is also in order on two dimensions. First, in an environment where gender, sexism, harassment, and discrimination are in the headlines every day, respondents may give positive responses about female candidates in a survey like ours because they know they are "supposed" to support women (Krupnikov, Piston, and Bauer 2016). The backlash effects against Simpson's gender stereotyping attacks, then, may reflect respondents' views of the socially appropriate response, not the way they actually feel or how they would actually update their views in a real-world election. Although we cannot rule out this possibility entirely, Hopkins' (2009) analysis of surveys going back to the 1990s uncovers no measureable difference between the support female candidates receive in polls and their performance in elections. What respondents say in surveys about female candidates tends to be a reliable indicator of their voting behavior (see also Brownback and Novotny 2018; Kennedy et al. 2018). The fact that our subjects moved in theoretically predictable ways in response to the treatments also suggests that social desirability is not responsible for our findings.

Second, as in virtually all experimental research like ours, respondents had no pre-existing connection to Deborah Reeves or Martin Simpson when they were introduced in the news story. Would voters who already supported Simpson react unfavorably if he attacked Reeves (whom they didn't support) for not being qualified or tough enough? Given everything we know about motivated reasoning, it seems likely that Simpson's supporters would just as soon justify his attack as a legitimate criticism, deny that it was gendered (if that mattered to them), and remain steadfast in their support. But that same dynamic would presumably also work to blunt the negative effects of such attacks against Reeves among her supporters, which would lead us back to the place our study ends: Gender stereotype attacks generally aren't a significant threat to women on the campaign trail. Future research would benefit, however, from an effort to study these dynamics using observational

data in a context – real primaries – where voters have pre-existing loyalties that might moderate their responses to campaign attacks.

Caveats notwithstanding, what do these findings say about the broader landscape for women in American politics? Our experiments suggest that male candidates alienate more voters than they persuade by trying to activate gender stereotypes. That may help explain why most American political campaigns are not heavily gendered (see Hayes and Lawless 2016). Male candidates running against women have little to gain (and potentially much to lose) by tapping into what they might hope are liabilities for female candidates. This is especially true in all but those districts where large numbers of voters hold conservative views about gender roles and equality. Elsewhere, such attacks will have a hard time finding a receptive audience. For a male candidate trying to pull votes away from a female primary opponent, drawing other lines of contrast – ideology, experience – and steering clear of gender is likely the optimal strategy.

None of this is to say that gender stereotypes could never be problematic. They may harm a female candidate when she is perceived as uncompetitive or lacking viability (Kahn 1994), or when national security concerns dominate the issue environment (Merolla, Holman, and Zechmeister 2011; Lawless 2004). It's also possible that a gender stereotype could be more damaging to a woman if it was raised by a source other than a male opponent, such as the news media. That would at least reduce the kind of backlash our experiments uncovered. But these scenarios are highly conditional and would depend on two things: a campaign environment in which gender is a central theme and an electorate inclined to evaluate female candidates through the lens of stereotypes. In an era in which most media coverage of campaigns is not gendered (Hayes and Lawless 2016) and voters' assessments of candidates appear to depend less and less on stereotypes (Brooks 2013; Dolan 2014), these factors may pose less of a threat to the fortunes of women running for office – even in primaries – than many observers fear.

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Supplemental Information

Table of Contents

Table A1. Sample Comparisons

	Mechanical Turk (2016)	Lucid (2018)	ANES (2016)
Partisanship			
Strong Democrat	22 %	25 %	21 %
Not very strong Democrat	24	15	13
Leans Democrat	14	8	11
Independent	14	16	14
Leans Republican	7	8	12
Not very strong Republican	12	11	12
Strong Republican	7	18	17
Political Ideology			
Extremely liberal	10	7	3
Liberal	30	14	12
Slightly liberal	13	9	9
Moderate	20	26	21
Slightly conservative	11	11	12
Conservative	12	15	16
Extremely conservative	4	8	4
Haven't thought much about it	1	10	22
Sex			
Male	52	47	47
Female	48	53	53
Education			
Less than high school	0	4	7
High school diploma	12	27	19
Some college	25	21	21
Associate's degree	12	9	14
Bachelor's degree	39	27	22
Advanced degree	12	10	16
Age			
Mean	35 years	46 years	48 years
Range	18 – 74	18 – 94	18 – 90
N	1,120	2,266	4,271

Appendix A: The Pre-Survey Instruments

STUDY 1 (MECHANICAL TURK SAMPLE)

What is your sex?

- Male
- Female

We hear a lot of talk these days about liberals and conservatives. When it comes to politics, how do you usually describe yourself?

- Extremely liberal
- Liberal
- Slightly liberal
- Moderate
- Slightly conservative
- Conservative
- Extremely conservative
- Haven't thought much about it

Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or what?

- Republican
- Democrat
- Independent
- Other party

    (Depending on answer:)

    - Would you call yourself a strong Republican, or a not very strong Republican?
    - Would you call yourself a strong Democrat, or a not very strong Democrat?
    - Do you think of yourself as closer to the Republican Party or the Democratic Party?

What is the highest level of formal education you have received?

- Grade school
- High school or GED
- Some college
- Associate's degree
- Bachelor's degree
- Advanced degree

Think about the following groups of people. How much discrimination do you think each group faces in the United States today?

- Women
- Men
- Blacks
- Latinos
- Muslims
- Whites
  Response options:

  - A great deal
  - Some
  - A little
  - None at all

Here are a number of statements with which you may or may not agree. Please indicate the extent to which you agree or disagree with each statement.

- Discrimination against women is no longer a problem in the United States.
- Blacks and Latinos often miss out on good jobs due to racial discrimination.
- Society has reached the point where women and men have equal opportunities for achievement.
- Over the past few years, the government and the news media have been showing more concern about the treatment of Blacks than is warranted by their actual experiences.
- Feminism has had a positive impact on social and political life in the United States.

  Response options:

  - Disagree strongly
  - Disagree moderately
  - Disagree a little
  - Neither agree nor disagree
  - Agree a little
  - Agree moderately
  - Agree strongly

What is your race?

- White
- Black
- Hispanic
- Asian
- Other

How old are you?

In what state do you live?

STUDY 2 (LUCID SAMPLE)

Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or what?

- Republican
- Democrat
- Independent
- Other party

    (Depending on answer:)

    - Would you call yourself a strong Republican, or a not very strong Republican?
    - Would you call yourself a strong Democrat, or a not very strong Democrat?
    - Do you think of yourself as closer to the Republican Party or the Democratic Party?

In what state do you live?

Think about the following groups of people. How much discrimination do you think each group faces in the United States today?

- Women
- Men
- Blacks
- Latinos
- Muslims
- Whites
- Poor people
- Christians
- Atheists
- Immigrants

    Response options:

    - A great deal
    - Some
    - A little
    - None at all

Here are a number of statements with which you may or may not agree. Please indicate the extent to which you agree or disagree with each statement.

- Discrimination against women is no longer a problem in the United States.
- Blacks and Latinos often miss out on good jobs due to racial discrimination.
- Society has reached the point where women and men have equal opportunities for achievement.
- Over the past few years, the government and the news media have been showing more concern about the treatment of Blacks than is warranted by their actual experiences.
- Feminism has had a positive impact on social and political life in the United States.
- Poor people have just as many opportunities to succeed as wealthy people.

Response options:

- Disagree strongly
- Disagree moderately
- Disagree a little
- Neither agree nor disagree
- Agree a little
- Agree moderately
- Agree strongly

We hear a lot of talk these days about liberals and conservatives. When it comes to politics, how do you usually describe yourself?

- Extremely liberal
- Liberal
- Slightly liberal
- Moderate
- Slightly conservative
- Conservative
- Extremely conservative
- Haven't thought much about it

Here are a number of personality traits that may or may not apply to you. Please indicate the extent to which you agree or disagree that each pair of traits applies to you, even if one characteristic applies more strongly than the other. I see myself as...

- extraverted, enthusiastic
- critical, quarrelsome
- dependable, self-disciplined
- anxious, easily upset
- open to new experiences, complex
- reserved, quiet
- sympathetic, warm
- disorganized, careless
- calm, emotionally stable
- conventional, uncreative

Response options:

- Disagree strongly
- Disagree moderately
- Disagree a little
- Neither agree nor disagree
- Agree a little
- Agree moderately
- Agree strongly

Some demographic and other respondent data supplied by Lucid.

STUDY 1 (MECHANICAL TURK SAMPLE)

The "Qualifications" Experiment Conditions

Condition 1: Control
Now we'd like to get your impression of some candidates for political office. In Wisconsin, there is a primary race for the state legislature between two [Republicans/Democrats], Deborah Reeves and Martin Simpson.

Deborah Reeves is an attorney who has served on her local city council for four years. Martin Simpson is a college professor who has served on his local county commission for four years. Both are natives of Wisconsin.

The two [Republicans/Democrats] are in a competitive campaign, with polls showing them locked in a tight battle.

Condition 2: Implicit, No Response
Now we'd like to get your impression of some candidates for political office. In Wisconsin, there is a primary race for the state legislature between two [Republicans/Democrats], Deborah Reeves and Martin Simpson.

Deborah Reeves is a college professor who has served on her local city council for four years. Martin Simpson is an attorney who has served on his local county commission for four years. Both are natives of Wisconsin.

Last week, the local newspaper in the district reported on the campaign. Here's an excerpt from the article:

> "The state legislative contest heated up Monday when Martin Simpson said in an interview that his opponent in the [Republican/Democratic] primary, Deborah Reeves, was 'not qualified' to serve the district.
>
> 'I don't think we should elect someone who doesn't share the values of this district,' Simpson said. 'Deborah Reeves would not do a good job representing our interests in Madison. And for that reason, I think she's not qualified.'
>
> The comments came in the midst of a competitive primary campaign, with polls showing the two [Republicans/Democrats] locked in a tight battle."

Condition 3: Implicit, Sexism Response
Now we'd like to get your impression of some candidates for political office. In Wisconsin, there is a primary race for the state legislature between two [Republicans/Democrats], Deborah Reeves and Martin Simpson.

Deborah Reeves is a college professor who has served on her local city council for four years. Martin Simpson is an attorney who has served on his local county commission for four years. Both are natives of Wisconsin.

Last week, the local newspaper in the district reported on the campaign. Here's an excerpt from the article:

"The state legislative contest heated up Monday when Martin Simpson said in an interview that his opponent in the [Republican/Democratic] primary, Deborah Reeves, was 'not qualified' to serve the district.

'I don't think we should elect someone who doesn't share the values of this district,' Simpson said. 'Deborah Reeves would not do a good job representing our interests in Madison. And for that reason, I think she's not qualified.'

Reeves' campaign responded by issuing a statement denouncing Simpson's remarks. 'For him to call Deborah Reeves unqualified is ridiculous and smacks of sexism,' the statement said. 'We think the people of this district deserve a campaign that doesn't involve attacking women's qualifications.'

The comments came in the midst of a competitive primary campaign, with polls showing the two [Republicans/Democrats] locked in a tight battle."

Condition 4: Implicit, Special Interest Response

Now we'd like to get your impression of some candidates for political office. In Wisconsin, there is a primary race for the state legislature between two [Republicans/Democrats], Deborah Reeves and Martin Simpson.

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Reeves' campaign responded by issuing a statement denouncing Simpson's remarks. 'For him to call Deborah Reeves unqualified is ridiculous and smacks of hypocrisy,' the statement said. 'Simpson is beholden to the special interests that are funding his campaign, not the people of this district.'

The comments came in the midst of a competitive primary campaign, with polls showing the two [Republicans/Democrats] locked in a tight battle."

Condition 5: Explicit, No Response

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> 'I don't think we should elect someone who doesn't share the values of this district,' Simpson said. 'Deborah Reeves would not do a good job representing our interests in Madison. She's a woman, and that's the only reason she's doing as well as she is. I think she's unqualified.'
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> The comments came in the midst of a competitive primary campaign, with polls showing the two [Republicans/Democrats] locked in a tight battle."

Condition 6: Explicit, Sexism Response

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> The comments came in the midst of a competitive primary campaign, with polls showing the two [Republicans/Democrats] locked in a tight battle."

Condition 8: Non-Gendered, No Response

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> 'I don't think we should elect someone who doesn't share the values of this district,' Simpson said. 'Deborah Reeves would not do a good job representing our interests in Madison. And that's because she's bought by, and will accountable to, the big money donors paying for her campaign.'
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> The comments came in the midst of a competitive primary campaign, with polls showing the two [Republicans/Democrats] locked in a tight battle."

Condition 9: Non-Gendered, Sexism Response

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Simpson who is beholden to the special interests that are funding his campaign, not the people of this district.'

The comments came in the midst of a competitive primary campaign, with polls showing the two [Republicans/Democrats] locked in a tight battle."

STUDY 2 (LUCID SAMPLE)

The "Toughness" Experiment Conditions

Republican respondents (including leaners) will be assigned to a treatment involving Republican primary candidates. Democratic respondents (including leaners) will be assigned to a treatment involving Democratic primary candidates. Pure independents will be randomly assigned to one of the treatments.

Condition 1: Control
Now we'd like to get your impression of some candidates for political office. In Delaware, there was recently a competitive primary race for the state legislature between two [Republicans/Democrats], Deborah Reeves and Martin Simpson.

Deborah Reeves is an attorney who has served on her local city council for four years. Martin Simpson is an attorney who has served on his local county commission for four years. Both are natives of Delaware.

Condition 2: Implicit, No Response
Now we'd like to get your impression of some candidates for political office. In Delaware, there was recently a competitive primary race for the state legislature between two [Republicans/Democrats], Deborah Reeves and Martin Simpson.

Deborah Reeves is an attorney who has served on her local city council for four years. Martin Simpson is an attorney who has served on his local county commission for four years. Both are natives of Delaware.

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> "The state legislative contest heated up Monday when Martin Simpson said in an interview that his opponent in the [Republican/Democratic] primary, Deborah Reeves, was 'not tough enough' to serve the district.
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> 'I don't think we should elect someone who wouldn't stand up for the people,' Simpson said. 'Deborah Reeves would not do a good job representing our interests in Dover. She's just not tough enough to get the job done.'
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> The comments came in the midst of a competitive primary campaign, with polls showing the two [Republicans/Democrats] locked in a tight battle."

Condition 3: Implicit, Sexism Response

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> 'I don't think we should elect someone who wouldn't stand up for the people,' Simpson said. 'Deborah Reeves would not do a good job representing our interests in Dover. She's just not tough enough to get the job done.'
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> Reeves' campaign responded by issuing a statement denouncing Simpson's remarks. 'For him to say I am not tough enough is ridiculous and smacks of sexism,' Reeves said in the statement. 'The people of this district deserve a campaign that doesn't involve attacking women's toughness.'
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> The comments came in the midst of a competitive primary campaign, with polls showing the two [Republicans/Democrats] locked in a tight battle."

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> The comments came in the midst of a competitive primary campaign, with polls showing the two [Republicans/Democrats] locked in a tight battle."

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> The comments came in the midst of a competitive primary campaign, with polls showing the two [Republicans/Democrats] locked in a tight battle."

Condition 10: Non-Gendered, Special Interests Response

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> The comments came in the midst of a competitive primary campaign, with polls showing the two [Republicans/Democrats] locked in a tight battle."

Appendix C: The Post-Exposure Survey Instruments

Thinking about the two candidates you just read about, how favorable is your impression? On a scale from 0 to 10, with 0 representing very unfavorable and 10 representing very favorable, how would you rate each of them? Use the sliders below.
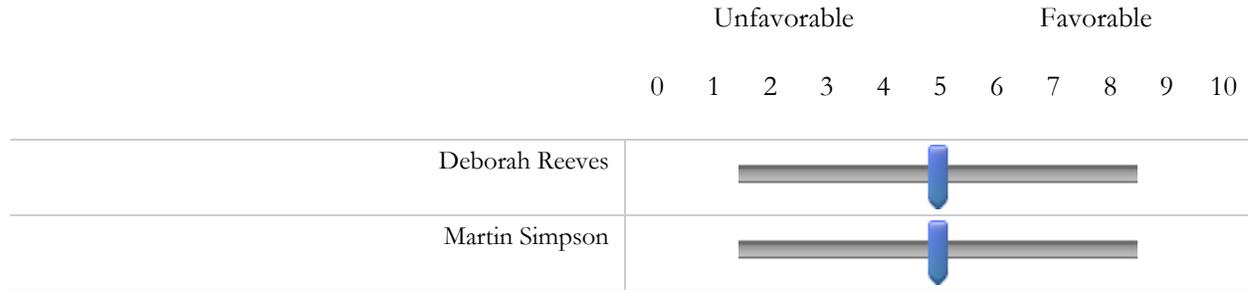
	Unfavorable								Favorable		
	0	1	2	3	4	5	6	7	8	9	10
Deborah Reeves											
Martin Simpson											

Below you will see a list of words or phrases. On a scale from 0 to 10, please indicate how well each word or phrase describes *Deborah Reeves*. On this scale, 0 means that the phrase does not describe *Deborah Reeves* well at all, and 10 means that the phrase describes *Deborah Reeves* very well. Use the sliders below.
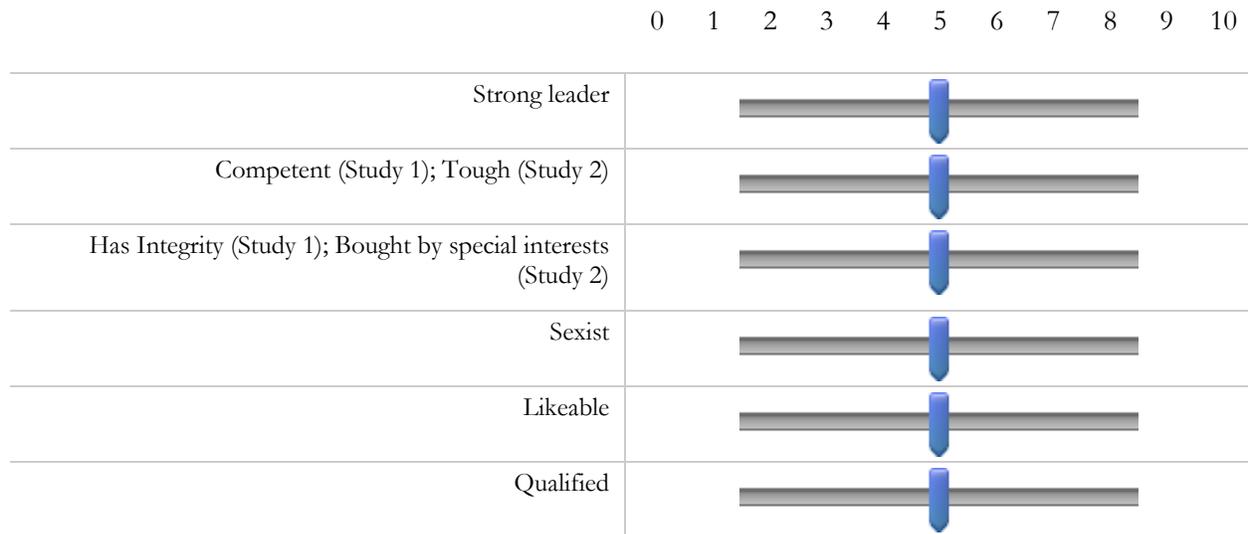
	0	1	2	3	4	5	6	7	8	9	10
Strong leader											
Competent (Study 1); Tough (Study 2)											
Has Integrity (Study 1); Bought by special interests (Study 2)											
Sexist											
Likeable											
Qualified											

Below you will see a list of words or phrases. On a scale from 0 to 10, please indicate how well each word or phrase describes *Martin Simpson*. On this scale, 0 means that the phrase does not describe *Martin Simpson* well at all, and 10 means that the phrase describes *Martin Simpson* very well. Use the sliders below.

	0	1	2	3	4	5	6	7	8	9	10
Strong leader											
Competent (Study 1); Tough (Study 2)											
Has Integrity (Study 1); Bought by special interests (Study 2)											
Sexist											
Likeable											
Qualified											

Table A2. Favorability Scores of Deborah Reeves and Martin Simpson (Study 1)

DEMOCRATIC PRIMARY

Type of Attack	Response	N	Reeves Mean Favorability (and standard deviation)	Simpson Mean Favorability (and standard deviation)
Control	N/A	76	6.41 (2.03)	6.12 (2.08)
Explicit	None	62	6.24 (1.75)	2.90 (2.41)
Explicit	Sexism	75	6.31 (2.34)	2.48 (2.48)
Explicit	Special Interests	59	6.71 (2.34)	2.78 (2.34)
Implicit	None	79	5.66 (2.28)	3.97 (2.18)
Implicit	Sexism	88	5.67 (2.25)	3.83 (2.44)
Implicit	Special Interests	95	5.63 (2.12)	3.63 (2.01)
Non-Gendered	None	63	4.63 (1.85)	4.87 (1.76)
Non-Gendered	Sexism	85	4.73 (2.40)	4.69 (2.23)
Non-Gendered	Special Interests	61	4.10 (2.34)	4.33 (2.45)

REPUBLICAN PRIMARY

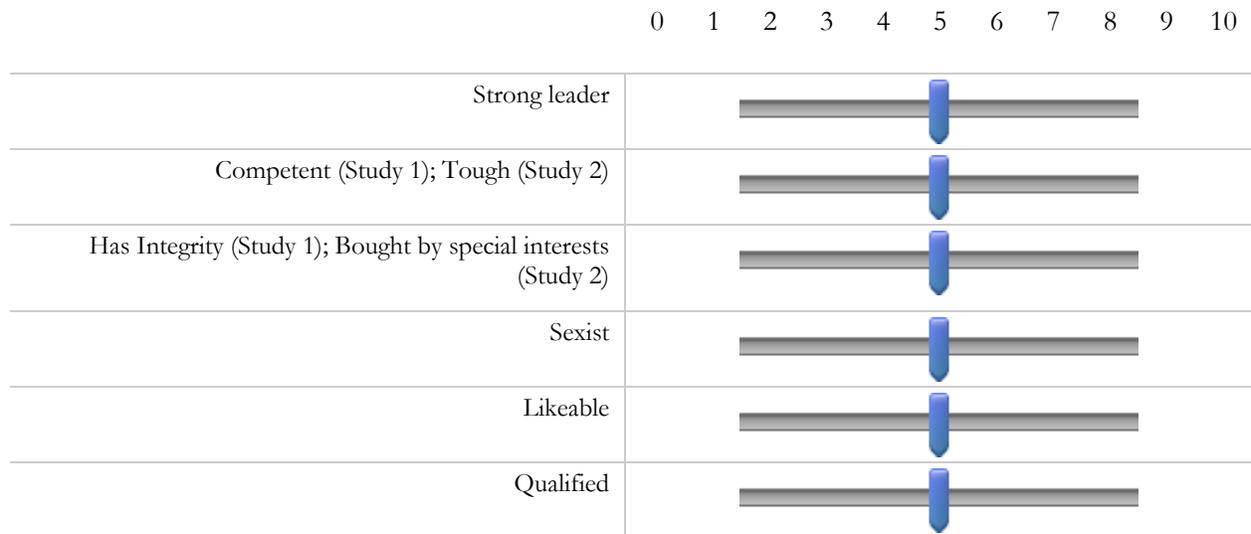| Type of Attack	Response	N	Reeves Mean Favorability (and standard deviation)	Simpson Mean Favorability (and standard deviation)
Control	N/A	36	6.08 (2.31)	6.22 (1.93)
Explicit	None	43	5.26 (2.53)	3.16 (2.57)
Explicit	Sexism	32	5.72 (2.30)	3.53 (2.50)
Explicit	Special Interests	31	5.65 (2.14)	3.58 (2.35)
Implicit	None	38	4.68 (2.01)	5.24 (2.44)
Implicit	Sexism	33	5.00 (2.76)	4.61 (2.11)
Implicit	Special Interests	40	5.18 (2.26)	4.23 (1.83)
Non-Gendered	None	41	4.07 (2.25)	4.66 (2.40)
Non-Gendered	Sexism	42	4.17 (2.38)	4.81 (2.28)
Non-Gendered	Special Interests	40	3.95 (2.28)	3.90 (2.24)

Table A3. Favorability Scores of Deborah Reeves and Martin Simpson (Study 2)

DEMOCRATIC PRIMARY

| Type of Attack	Response	N	Reeves Mean Favorability (and standard deviation)	Simpson Mean Favorability (and standard deviation)
Control	N/A	117	6.19 (2.23)	5.79 (2.20)
Explicit	None	114	6.16 (2.14)	4.00 (2.60
Explicit	Sexism	129	6.85 (2.35)	3.46 (2.61)
Explicit	Special Interests	120	6.33 (2.28)	4.14 (2.72)
Implicit	None	138	6.33 (2.21)	4.58 (2.30)
Implicit	Sexism	137	6.34 (2.11)	4.50 (2.43)
Implicit	Special Interests	123	5.70 (2.69)	4.25 (2.59)
Non-Gendered	None	116	6.00 (1.91)	5.18 (2.31)
Non-Gendered	Sexism	131	6.06 (2.28)	4.82 (2.56)
Non-Gendered	Special Interests	118	5.93 (2.23)	5.06 (2.34)

REPUBLICAN PRIMARY

Type of Attack	Response	N	Reeves Mean Favorability (and standard deviation)	Simpson Mean Favorability (and standard deviation)
Control	N/A	104	6.25 (2.17)	6.15 (2.14)
Explicit	None	103	5.62 (2.09)	4.61 (2.36)
Explicit	Sexism	95	6.24 (2.34)	4.49 (2.60)
Explicit	Special Interests	107	5.80 (2.11)	4.33 (2.42)
Implicit	None	100	5.67 (2.15)	5.01 (2.32)
Implicit	Sexism	112	6.13 (2.23)	4.90 (2.32)
Implicit	Special Interests	91	5.52 (2.31)	4.38 (2.23)
Non-Gendered	None	117	5.63 (2.18)	4.80 (2.32)
Non-Gendered	Sexism	92	5.08 (2.81)	4.86 (2.61)
Non-Gendered	Special Interests	102	5.30 (2.25)	4.61 (2.02)

Figure A1. Treatment Effects of Campaign Attacks and Responses
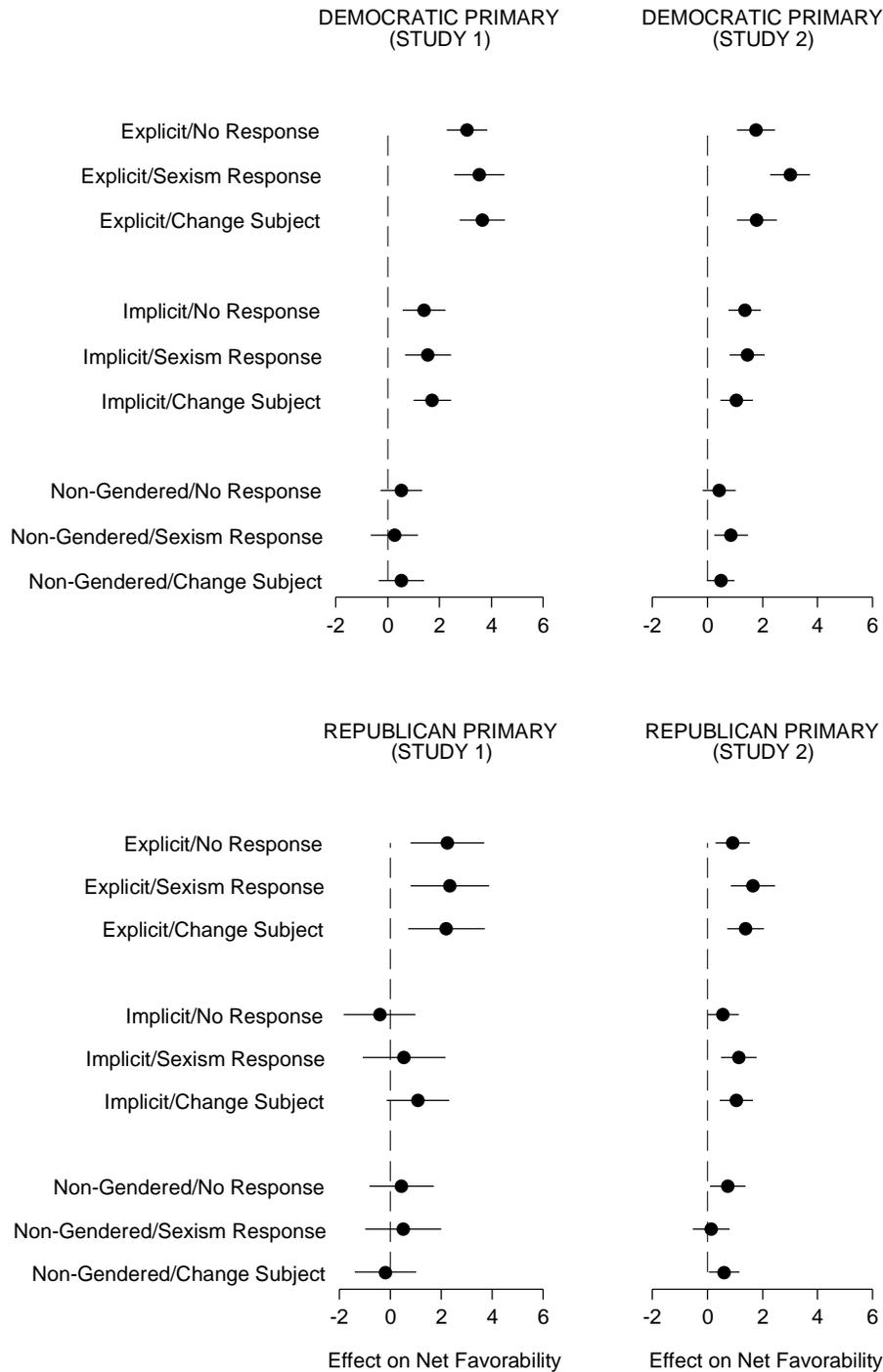
Note: Estimates present differences in mean net favorability from the control (with 95% confidence intervals). Scores above zero indicate an advantage for the female candidate, Deborah Reeves. Samples sizes: Study 1, Democratic Primary = 744; Study 2, Democratic Primary = 1,233; Study 1, Republican Primary = 376; Study 2, Republican Primary = 1,012.

Table A4. Evaluations of Martin Simpson in the Democratic Primary

STUDY 1

	Qualified	Strong Leader	Competent	Has Integrity	Likeable	Sexist
Explicit Gender Attack	-1.55 * (0.28)	-2.31 * (0.28)	-2.28 * (0.28)	-3.14 * (0.30)	-3.61 * (0.30)	4.16 * (0.37)
Implicit Gender Attack	-0.86 * (0.27)	-1.45 * (0.27)	-1.12 * (0.27)	-1.99 * (0.29)	-2.30 * (0.28)	1.81 * (0.36)
Non-Gendered Attack	-0.78 * (0.28)	-0.95 * (0.28)	-0.98 * (0.28)	-1.19 * (0.30)	-1.38 * (0.29)	0.70 (0.37)
Constant	6.96 * (0.24)	6.72 * (0.24)	6.99 * (0.24)	6.38 * (0.26)	6.38 * (0.25)	3.51 * (0.31)
Adjusted R^2	0.04	0.10	0.09	0.15	0.20	0.22
N	744	744	744	744	744	744

STUDY 2

	Qualified	Strong Leader	Tough	Beholden	Likeable	Sexist
Explicit Gender Attack	-0.83 * (0.25)	-1.11 * (0.25)	-0.55 * (0.24)	0.34 (0.24)	-1.54 * (0.26)	2.39 * (0.30)
Implicit Gender Attack	-0.44 (0.24)	-0.65 * (0.25)	-0.23 (0.24)	0.52 * (0.24)	-0.99 * (0.26)	1.76 * (0.29)
Non-Gendered Attack	-0.27 (0.25)	-0.47 (0.25)	0.14 (0.24)	0.50 * (0.24)	-0.58 * (0.26)	0.96 * (0.29)
Constant	6.16 * (0.21)	5.98 * (0.22)	5.67 * (0.21)	5.18 * (0.21)	5.63 * (0.23)	4.21 * (0.26)
Adjusted R^2	0.01	0.02	0.01	0.00	0.03	0.06
N	1,233	1,233	1,233	1,233	1,233	1,233

Notes: * $p < .05$

Table A5. Evaluations of Deborah Reeves in the Democratic Primary

STUDY 1

	Qualified	Strong Leader	Competent	Has Integrity	Likeable	Sexist
Explicit Gender Attack	-0.40 (0.29)	-0.45 (0.27)	-0.63 * (0.28)	-0.06 (0.29)	-0.46 (0.28)	-0.48 (0.34)
Implicit Gender Attack	-0.47 (0.28)	-0.70 * (0.26)	-0.68 * (0.27)	-0.55 * (0.28)	-0.79 * (0.27)	-0.23 (0.33)
Non-Gendered Attack	-1.28 * (0.29)	-1.35 * (0.27)	-1.32 * (0.28)	-1.84 * (0.28)	-1.86 * (0.28)	0.27 (0.34)
Constant	7.24 * (0.25)	6.83 * (0.23)	7.37 * (0.24)	6.67 * (0.24)	6.74 * (0.24)	2.70 * (0.29)
Adjusted R^2	0.03	0.04	0.03	0.10	0.08	0.01
N	744	744	744	744	744	744

STUDY 2

	Qualified	Strong Leader	Tough	Beholden	Likeable	Sexist
Explicit Gender Attack	0.18 (0.24)	0.21 (0.24)	0.41 (0.23)	-0.03 (0.26)	0.54 * (0.24)	-0.32 (0.28)
Implicit Gender Attack	0.16 (0.24)	0.08 (0.23)	0.41 (0.23)	0.22 (0.25)	0.46 * (0.23)	-0.35 (0.28)
Non-Gendered Attack	-0.13 (0.24)	-0.17 (0.23)	0.25 (0.23)	0.28 (0.26)	0.23 (0.24)	0.27 (0.28)
Constant	6.49 * (0.21)	6.25 * (0.20)	5.83 * (0.20)	5.02 * (0.22)	5.85 * (0.21)	3.82 * (0.24)
Adjusted R^2	0.00	0.00	0.00	0.00	0.00	0.01
N	1,232	1,232	1,232	1,232	1,232	1,232

Notes: * $p < .05$

Table A6. Evaluations of Martin Simpson in the Republican Primary

STUDY 1

	Qualified	Strong Leader	Competent	Has Integrity	Likeable	Sexist
Explicit Gender Attack	-1.54 *	-1.79 *	-1.47 *	-2.39 *	-2.51 *	2.87 *
	(0.40)	(0.40)	(0.39)	(0.42)	(0.42)	(0.55)
Implicit Gender Attack	-1.38 *	-1.09 *	-1.18 *	-1.52 *	-1.69 *	1.28 *
	(0.40)	(0.40)	(0.38)	(0.41)	(0.42)	(0.55)
Non-Gendered Attack	-1.09 *	-1.13 *	-1.16 *	-1.53 *	-1.80 *	1.01
	(0.39)	(0.40)	(0.38)	(0.41)	(0.42)	(0.54)
Constant	6.86 *	6.72 *	6.83 *	6.39 *	6.33 *	3.25 *
	(0.34)	(0.35)	(0.33)	(0.36)	(0.37)	(0.48)
Adjusted R^2	0.03	0.04	0.03	0.08	0.08	0.09
N	376	376	376	376	376	376

STUDY 2

	Qualified	Strong Leader	Tough	Beholden	Likeable	Sexist
Explicit Gender Attack	-0.66 *	-1.03 *	-0.42	-0.04	-1.57 *	1.33 *
	(0.24)	(0.25)	(0.24)	(0.25)	(0.26)	(0.30)
Implicit Gender Attack	-1.02 *	-1.01 *	-0.65 *	-0.23	-1.59 *	0.68 *
	(0.24)	(0.25)	(0.24)	(0.25)	(0.26)	(0.30)
Non-Gendered Attack	-0.85 *	-1.04 *	-0.65 *	-0.27	-1.42 *	-0.02
	(0.24)	(0.25)	(0.24)	(0.25)	(0.26)	(0.30)
Constant	6.68 *	6.47 *	6.22 *	5.60 *	6.41 *	4.68 *
	(0.21)	(0.22)	(0.20)	(0.22)	(0.22)	(0.26)
Adjusted R^2	0.02	0.02	0.01	-0.00	0.04	0.04
N	1,015	1,015	1,015	1,015	1,015	1,015

Notes: * $p < .05$

Table A7. Evaluations of Deborah Reeves in the Republican Primary

STUDY 1

	Qualified	Strong Leader	Competent	Has Integrity	Likeable	Sexist
Explicit Gender Attack	-0.78	-0.79	-0.63	-0.63	-0.83	-0.00
	(0.41)	(0.42)	(0.41)	(0.44)	(0.44)	(0.52)
Implicit Gender Attack	-1.06 *	-0.79	-0.61	-0.90 *	-1.01 *	0.52
	(0.40)	(0.42)	(0.41)	(0.44)	(0.43)	(0.52)
Non-Gendered Attack	-1.03 *	-1.41 *	-1.05 *	-1.96 *	-1.68 *	0.46
	(0.40)	(0.42)	(0.40)	(0.43)	(0.43)	(0.51)
Constant	6.78 *	6.31 *	6.64 *	6.36 *	6.39 *	2.83 *
	(0.35)	(0.37)	(0.35)	(0.38)	(0.38)	(0.45)
Adjusted R^2	0.01	0.03	0.01	0.07	0.04	-0.00
N	376	376	376	376	376	376

STUDY 2

	Qualified	Strong Leader	Tough	Beholden	Likeable	Sexist
Explicit Gender Attack	-0.35	-0.34	-0.25	-0.46	-0.29	-0.59 *
	(0.25)	(0.24)	(0.24)	(0.25)	(0.24)	(0.28)
Implicit Gender Attack	-0.53 *	-0.49 *	-0.57 *	-0.62 *	-0.59 *	-0.69 *
	(0.25)	(0.24)	(0.24)	(0.25)	(0.24)	(0.28)
Non-Gendered Attack	-0.83 *	-0.71 *	-0.81 *	-0.78 *	-0.95 *	-0.46
	(0.25)	(0.24)	(0.24)	(0.25)	(0.24)	(0.28)
Constant	6.75 *	6.33 *	6.17 *	5.86 *	6.42 *	4.66 *
	(0.22)	(0.21)	(0.20)	(0.22)	(0.21)	(0.24)
Adjusted R^2	0.01	0.01	0.01	0.01	0.02	0.00
N	1,012	1,012	1,012	1,012	1,012	1,012

Notes: * $p < .05$