Abstract: Recent work has explored how misperceptions about gender bias in American elections may help explain women’s under-representation. We argue that media messages that portray female candidates as facing bias can have a range of effects – some that are beneficial for women running for office, but others that are likely to perpetuate the long-standing gender gap in political ambition. Using a novel survey experiment administered on samples of the general public, campaign donors, and young Americans, we show that news coverage portraying women as facing bias boosts female candidates’ support along with the willingness of young people to engage in campaign activism on their behalf, as compared to coverage that describes an equal playing field. Simultaneously, it does not affect female candidates’ fundraising ability. But paradoxically, such coverage also reduces young women’s confidence in their own ability to run a political campaign. These results suggest long-term implications for women’s under-representation.
In an effort to understand the roots of women’s under-representation in the United States, scholars in recent years have begun studying public perceptions of gender bias in politics. Research has shown that most Americans believe women face significant disadvantages when they run for office (e.g., Brooks 2013; Pew 2015). Compared to male candidates, it is widely assumed that women experience unfair media coverage, have a harder time raising money, and encounter discrimination from voters (Hayes and Lawless 2016). Ultimately, a majority of Americans believe that women who run for office simply are not as likely to win as men (Dowling and Miller 2015). Even though these perceptions are disputed by empirical research, there is concern that they could undermine women’s willingness to run for office, perpetuating the long-standing gender gap in political ambition (Lawless and Fox 2010).

While the existing work has focused on public attitudes, we suggest in this paper that messages about gender bias in American elections can also influence citizens’ political behavior in ways that are consequential for women’s representation. We argue that exposure to media coverage that portrays female candidates as facing electoral disadvantages because of their sex is likely to have a wide range of effects – some that benefit female candidates, but others that pose challenges for women’s representation in the long run. Using a novel survey experiment administered on samples of the general public, campaign donors, and young Americans, we show that news coverage framing women as facing electoral bias boosts female candidates’ support, along with the willingness of young people to engage in campaign activism on their behalf. Simultaneously, it does not affect female candidates’ fundraising ability. But paradoxically, such coverage also reduces young women’s confidence in their own ability to run a political campaign.

This study makes multiple contributions. Substantively, we show that media coverage about gender in American elections – which often emphasizes electoral bias against women, despite academic research to the contrary – can provide short-term benefits to female candidates as
compared to coverage describing an equal playing field for male and female candidates. This helps explain why messages about gender bias persist in the political environment, since it can help women win votes and recruit volunteers. But our findings also suggest that the perpetuation of that message may be harmful over time, as it can undermine the electoral confidence of the next generation of potential female candidates. In doing so, it may make it harder to close the gender gap in political ambition. Public perceptions of bias against women in politics may have deleterious consequences in the long run.

Methodologically, our innovative survey experiment underscores the importance of thinking broadly about the heterogeneous effects of political communication. Using the same instrument, we find no effects among donors, and we find effects on different behaviors for a cross-section of U.S. adults as compared to college students. Were we to have taken the typical approach of just examining the responses of a single group, our conclusions about the influence of media messages about gender bias would have been very different, and ultimately incomplete. To the extent that it is both feasible and theoretically important, the study shows that scholars need research designs that can capture a range of relevant effects among a range of relevant political actors.

The Sources and Perceptions of Women’s Under-representation

Despite the gains of recent decades, women remain numerically under-represented in American politics. As of 2016, 20% of the U.S. Senate and 19% of the U.S. House is made up of women. Just one-quarter of state legislators are women. Women hold the governor’s offices in only 6 of the 50 states, and just 19 mayors in the country’s 100 biggest cities are women.¹

For years, the scholarly literature showed that gender stereotypes among the American public contributed to this disparity. Studies tended to find that female candidates were seen as not tough enough to lead, and/or that they lacked the ability to handle the “masculine” issues, such as

¹ See the Center for American Women and Politics (http://www.cawp.rutgers.edu/).
crime and national security, that were often at the center of political debates (e.g., Alexander and Andersen 1993; Burrell 1994; Huddy and Terkildsen 1993; Lawless 2004; Rosenwasser and Dean 1989; for notable exceptions even decades ago, however, see Kahn 1994). Media coverage also reflected gender stereotypes, with women frequently portrayed in “feminine” or less substantive terms (e.g., Aday and Devitt 2001; Braden 1996; Kahn 1996). Although stereotypes did not always work to women’s detriment (e.g., Paolino 1995), they were generally seen as obstacles that female candidates had to overcome.

More recently, scholars have found that women no longer face such disadvantages. As has been the case for many years, women who run for office raise just as much money, win just as many votes, and are elected just as often as men (e.g., Burrell 2014; Fox 2013; Lawless 2015). At the same time, gender stereotypes do not harm female candidates’ prospects or lead voters to hold them to different standards on the campaign trail than men (Brooks 2013; Dolan 2014; Hayes, Lawless, and Baitinger 2014). The media also do not appear to treat women differently than men when they run for office (Atkeson and Krebs 2008; Hayes and Lawless 2016; Jalalzai 2006). Some work finds that gender stereotypes can be activated under particular conditions (e.g., Bauer 2015; Bell and Kauffman 2015; Dittmar 2015), but there is little contemporary evidence that women face systematic electoral disadvantages. In sum, while sexism on the campaign trail historically has played a role in women’s under-representation (Witt, Paget, and Matthews 1994), there is little evidence of gender bias in elections today.

Instead, the prevailing explanation for women’s continued under-representation is the gender gap in political ambition – the fact that women are less likely to run for office than men (e.g., Lawless and Fox 2010). This disparity has multiple roots, ranging from childhood socialization (Lawless and Fox 2010), patterns of political recruitment (Fox and Lawless 2010; Sanbonmatsu 2006), an aversion to electoral competition (Kanthak and Woon 2015), and an ideological mismatch.
with the Republican Party (Thomsen 2015). The upshot is that what happens before campaigns begin is what leads women to be under-represented, not electoral bias.

Nonetheless, much of the public believes that women face discrimination from voters and the media, and many people think that this explains why women are under-represented. When the Pew Research Center in 2008 asked Americans why there weren’t more women in high political office, 79% said voters weren’t ready to elect them, a number that was still 66% when Pew asked the same question in 2014. In a 2009 survey, Brooks (2013) found that three out of five Americans said that male candidates hold a slight or major advantage in elections; only 40% of the public believed men and women to be at electoral parity. Gallup and CBS News surveys show that Americans perceive women to be disadvantaged by voter attitudes and media coverage (Dowling and Miller 2015). Hayes and Lawless (2016) report that majorities of Americans believe women who run for office are subjected to sexist media coverage, which helps explain why nearly half believe women have to be more qualified than men to win and that women face direct discrimination by voters.

These perceptions are viewed as problematic for women’s representation because they may contribute to the gender gap in political ambition. This can be seen in surveys of “eligible candidates,” or individuals in the “feeder professions” that are most likely to lead to later political careers. Lawless and Fox’s (2010) interviews with these individuals show that 91% percent of women believed that it is more difficult for a woman to be elected to high-level office than it is for a man. Among men, that number was 77%. Similarly, 64% of women and 38% of men believe that it is harder for women than men to raise money (Lawless and Fox 2010, 124). The “twice as good” rule – the idea that women have to be twice as good as men to experience the same amount of

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3 The question was, “If a man and a woman were both equally qualified for office, do you think that one would have an advantage relative to the other in terms of winning the election?” Respondents were given five options: a major vs. slight advantage for male and female candidates and “Both would have an equal chance.” These data are derived only from the control group in the study (n=365).
success – was invoked as a point of fact by many respondents in Lawless and Fox’s (2010, 124-6) panel, with more than one-quarter volunteering ideas along that line. It is also quite likely that party leaders and activists share these same views, which may lead them to be less likely to recruit women to run for office than men (Sanbonmatsu 2006). Dowling and Miller (2015, 57) argue that the lack of electoral confidence among women is why correcting the public’s impressions about gender bias in elections is critical. They suggest that “if more women are equipped with the knowledge that they can run strong campaigns, it stands to reason that more will do so.”

Media Messages and Perceptions of Gender Bias

In many ways, the misperceptions about women’s electoral fortunes are understandable. For one, gender stereotypes are pervasive in society. People personally experience, engage in, and/or observe gender discrimination frequently in both social life and work settings (Eagly and Carli 2007; Prentice and Carranza 2002). It is thus reasonable to assume that the same types of biased dynamics are evident in electoral politics, where women are clearly under-represented. If gender bias makes it harder for women to rise to the top of the corporate ranks (e.g., Heilman 2001), it would hardly be a stretch to believe that it prevents women from achieving high elective office.

These perceptions are likely amplified and encouraged by the media, whose coverage of women in politics frequently suggests – both implicitly and explicitly – that women face discrimination when they run (Hayes and Lawless 2016). For example, when political insiders assert that the country is “not ready” for a female president or announce that women are discriminated against in elections, those claims tend to be widely reported by the press, typically without reference to academic research that challenges them.⁴ More generally, journalists regularly report that female

candidates face sexism and discrimination from the media, suggesting that it translates into lower levels of success at the polls.\(^5\)

This, of course, is hardly surprising. Scholars have long established that journalistic values encourage reporters to focus on bad news rather than good news, on conflict rather than compromise, and on problems rather than solutions (Bennett 2011; Gans 2004; McCombs et al, 2011). Claims of sexism and gender discrimination in politics are more consistent with those norms than would a focus on a lack of gender bias. And journalists themselves work in an industry that has a notably poor track record regarding the career advancement of women.\(^6\) The idea that women candidates suffer from discrimination would seem to have considerable face validity.

There is some evidence suggesting that media messages about women’s electoral fortunes can have important effects on the public. Specifically, Dowling and Miller (2015) report the results of an experiment in which they showed respondents an informational video highlighting the fact that women who run for office are just as likely to win elections as men. Compared to a control group, subjects who saw the video were significantly less likely to believe that women have a lower chance of winning than men, a perception that persisted even weeks after exposure to the message. From that work, we know that public learning can occur on these issues, and that accurate information about female candidates’ fortunes can “stick” over time.

Attitudes may simply be the tip of the iceberg, however; there is also reason to suspect that media messages may shape citizens’ political behavior in ways that are consequential for women’s

\(^5\) http://www.huffingtonpost.com/norma-cook-everist/many-men-still-fear-women-with-public-power_b_7501930.html; http://www.huffingtonpost.com/entry/woman-president_55d733e9e4b0a40aa3aa8e62

representation. A large literature has shown that political news coverage can affect voting behavior (see Dalton, Beck, and Huckfeldt 1992; Kahn and Kenney 2002), voter turnout (Althaus and Trautman 2008; McLeod, Scheufele, and Moy 1999), and political engagement (Hayes and Lawless 2015; Shaker 2014). And although no work has explored whether portrayals of gender bias in elections shape political behavior, we expect that such coverage could have a variety of behavioral consequences. In fact, given that discussions of women’s electoral fortunes are relevant for a number of different actors – voters, potential campaign activists and volunteers, donors, as well as young people considering future bids for office themselves – we expect media messages to have potentially wide-ranging effects. In the section that follows, we lay out our expectations for how media portrayals of women’s chances could influence female candidates’ electoral support, fundraising, campaign activism, and confidence that young women have in their ability to mount a successful political campaign. In addition, we explain the innovative approach we use to explore these varied effects across an unusually broad array of political actors.

**How Media Portrayals of Gender Bias May Shape Political Behavior**

At the most basic level, we begin by considering the effects that pessimistic messages about women’s electoral fortunes could have for voter support for female candidates. We expect that media coverage suggesting that women face gender bias will increase support for female candidates. This expectation emerges from the idea that an “underdog” effect may lead voters to be more supportive of a candidate facing as systematic disadvantage (Fleitas 1971; Ceci and Kain 1982). Work in psychology suggests that people sometimes express an affinity for an individual who is portrayed as struggling (Kim et al. 2008; Goldschmied and Vandello 2009), which could lead some voters to gravitate toward a female candidate.\(^7\) We do not expect that such effects will be confined

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\(^7\) An alternative hypothesis is that a negative portrayal of a female candidate’s chances could lead to a “bandwagon” effect, in which voters gravitate toward the candidate who appears to have a better chance of winning. But because our
to just respondents who are women. While there is intuitive appeal to the idea that women might tend to feel solidarity with a compatriot experiencing gender bias based on understandable sensitivity to sexism throughout history and in society today, we expect any increase in support to come from both men and women. This is because previous research has shown little in the way of consistent “gender affinity” effects between female voters and female candidates (Dolan 2008; Goodyear-Grant and Croskill 2011). At the same time, it will be important to test for that dynamic by looking at differences between male and female respondents, since gender affinity effects studies do not look at explicit gender bias, and this could conceivably have different dynamics.

Second, by the same basic logic, we expect such portrayals to increase campaign activism – such as volunteering and encouraging other citizens to support a candidate – on behalf of a female candidate. As women are portrayed as facing bias, we expect this to generate an uptick in the willingness of people to engage in activity that may help the female candidate. Our expectation here, however, is limited to a subset of the electorate – in particular, young people. That is because young people – and especially college-educated youth – form the core of the volunteer base for many contemporary political campaigns (see Enos and Hersh 2015). Thus, since college students tends to be the group that is responsive to recruitment efforts, we expect this to be the group whose willingness to engage in campaign activism is likely to be affected in response to portrayals of female candidates being disadvantaged.

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8 For instance, Enos and Hersh report that campaign workers tends to skew young and are dramatically more likely than the electorate at large to be either college graduates or young people in college. In 2012, this group made up 65.5% of Obama campaign workers, but just 33.9% of the electorate. This pattern is not restricted to the Obama campaign. Workers for other campaigns that Enos and Hersh surveyed were even younger than Obama workers (2015, Table A.7).

9 It should be noted that our data reveal that past political donors express a much higher likelihood of being active on behalf of a candidate than undergraduates. However, the very low incidence of donors in the population at large, combined with the numerous other responsibilities and interests that tend to consume the time of older wealthy individuals, mean that our focus for campaign activism should be on young people rather than on donors.
Third, by similar “underdog” logic, it might be reasonable to conclude that donors would be more likely to give money to candidates who are portrayed as being at a disadvantage. This could provide a fundraising boost for women who they described in the press as facing gender bias. Indeed, this is a perspective that appears to be held by consultants and groups that work on behalf of female candidates. In 2014, for instance, an official from Emily’s List, which supports pro-choice women running for office, told the New York Times that publicizing episodes of sexism against women was a major fundraising tool.\(^\text{10}\) Claims of bias against women also feature regularly in fundraising communications distributed by other organizations.\(^\text{11}\)

On the other hand, in contrast to the general public, there are theoretical reasons to believe that donors are less likely to be affected by this type of media coverage. First, donors, who are more engaged with politics and thus likely to have well-defined partisan and/or ideological preferences, are far less susceptible to media effects. This could be either because their partisan preferences are so strong (e.g., Abramowitz 2011) or simply because their political attitudes are more well-formed, thus resisting the effects of new information (e.g., Taber and Lodge 2006; Zaller 1992). Second, donors are also more likely to be strategic, which could mean that even if they prefer a given candidate, a news story portraying a female candidate as facing bias might simultaneously make the donor to believe that the candidate is more likely to lose, and that their money would be better spent elsewhere. Both of these dynamics make it less likely that we will find effects among donors than among voters or potential campaign volunteers.

The logic above suggests that media coverage that portrays women as disadvantage can help female candidates – and, in the case of donors, at least potentially not work to their detriment. But


\(^{11}\) Consider, for example, the decision by Political Parity, an interest group focused on the election of women candidates, to highlight and lead their November 5, 2015 marketing email with a quote by former U.S. Senator Carol Moseley-Braun: “We still haven’t made it beyond hair, hemlines, and husbands.”
based on the existing literature, we also suspect that overly pessimistic reporting will produce a problematic long-term effect. When women are portrayed as facing systematic disadvantages in elections, it will likely erode women’s confidence in their ability to run campaigns of their own, following the logic of Dowling and Miller (2015). Given Fox and Lawless’ (2011) findings that women are less likely to believe themselves to be qualified, we expect that such portrayals will amplify beliefs that women have a harder time competing in elections. When those attitudes are activated, this will lead to lower levels of confidence among women in their ability to orchestrate a successful campaign, a critical precursor to actually launching a bid for office. If we find this to be the case, it would mean that portrayals of women as facing electoral bias could contribute to the long-term gender gap by undermining women’s confidence in their ability to run for office in the future.

As with our focus on campaign activism, we test our electoral confidence hypothesis among young people.\textsuperscript{12} This is for two reasons. First, Fox and Lawless (2014) show that the gender gap in political ambition is already established by the time individuals reach college, making this a relevant period to explore young women’s perspective about running for office. Second, the vast majority of U.S. adults have had no thoughts of running for office in the future. Many are well past the time one would start a political career, and many lack a college education, which, while not technically required to run for public office, is the norm for most elected officials. And although average American college student will never run for office either, they are more likely to consider doing so than the average adult, and will tend to be at least somewhat better positioned to do so. Thus, focusing on the electoral confidence on this “next generation” of potential candidates allows us to

\textsuperscript{12} In addition to electoral confidence, we also measured their stated likelihood to run for office someday. However, as professors who work with closely with undergraduates on a daily basis, we know that college students tend to have enough trouble deciding their plans for the following week to have some wariness about putting too much stock in far-distant career plans. As such, we are treating electoral confidence as a necessary precursor to future decisions to run.
study the effects of media portrayals among a population for whom they could be particularly relevant.  

Research Design

This wide array of expectations requires an innovative research design. A typical approach in studies of political behavior is to administer a survey to a single sample, exploring perhaps several different dependent variables within that same sample. A second study might be conducted with a second sample, but typically with the goal of making inferences about the same population. Because we expect that media portrayals of gender bias in elections not only to affect various political behaviors, but that those effects should occur among different populations, our approach requires us to conduct surveys with multiple samples.

To do this, we designed a survey experiment that was conducted during the final weeks of the 2014 midterm elections. The survey was administered in late October to three different samples – a nationally-representative sample of American adults, a group of past donors to political campaigns, and a diverse sample of undergraduates at more than two dozen colleges and universities across the country. This approach allows us to study a variety of effects on outcomes relevant to women’s representation among the groups for whom those outcomes should be relevant.

U.S. Adult Sample

Our U.S. adult sample was drawn and administered by the survey firm YouGov. For standard U.S. adult samples, YouGov draws on its large “opt-in” panel and uses a variety of different methods in order to approximate a random draw of the U.S. public, utilizing a proprietary “sample matching” process targeted to a range of variables (gender, age, race, education, party

13 While a finely honed sample of “eligible candidates” in particular professions like that developed by Lawless and Fox (2010) would have been ideal, it was essential to keep the time period the same for all three studies and to use an Internet-based instrument as the survey tool. Because undergraduates can be counted on to use the Internet, and because we could gather their responses in the necessary time frame, using undergraduates made the most sense for this study.

14 Conducing the surveys simultaneously also ensures that we can eliminate any potential confound that could have been introduced if responses if the field periods had been different for any of the samples.
identification, ideology, and political interest). YouGov then weights the data back to expected population proportions based on demographics from the 2010 American Community Survey. Several studies have validated online samples as being at least as accurate as telephone surveys today (Berrens 2003; Sanders et al 2007; see also Rivers 2006). For our U.S. adult sample, we interviewed 1,297 individuals who were each assigned to one of our experimental conditions (see below). We use cell-based weighting to allow the sample within each cell to best reflect the demographics of the population at large.

**Donors**

Our survey of campaign donors was also carried out by YouGov, as a subset of our nationally representative sample. Political donors were sampled from the sizable YouGov opt-in panel of U.S. adults who have agreed to take YouGov surveys periodically. Donor sampling was based on 2012 political donations reported to the Federal Election Commission, as compiled and validated by Adam Bonica for the DIME database.

Rather than sample randomly from the full pool of donors in the YouGov panel, whereby small donors would be vastly overrepresented in numbers relative to their actual dollar power in campaigns, we instead drew more heavily from those donors on the panel with the highest FEC-reported donations. Leaning independents were included with the party toward which they lean, while pure independents who do not lean towards one of the two major parties – a relative rarity

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15 For more information about the YouGov panel, see [https://today.yougov.com/about/about-the-yougov-panel/](https://today.yougov.com/about/about-the-yougov-panel/). See also YouGov (2016).
16 This includes the 682 donors, as described below. This means that donors are weighted heavily downward based on demographics in our general population sample, since they comprise a relatively small percentage of the U.S. population. Campaign committees are required to report donations for the FEC that exceed $200 or more over the course of a given year. Because donors often make multiple donations over a year, some campaign committees report individual donations of under $200, which appear in our data. For more information on FEC reporting requirements, see [http://www.fec.gov/pages/brochures/citizens.shtml](http://www.fec.gov/pages/brochures/citizens.shtml).
17 See [http://data.stanford.edu/dime](http://data.stanford.edu/dime) for more information about the DIME database.
18 We placed our emphasis on larger donors, because they tend to drive the fundraising strategies of groups and campaigns. Small, one-time donors have less influence over the decisions of candidates and other organizations. Had we not prioritized larger donors, our sample would have been dominated by the vastly greater number of donors who contribute small amounts of money to campaigns.
among large political donors – were excluded from the donor study. Due to the expectation of
differences in donation levels depending on gender and partisanship, we took extra steps to make
sure that the cells in our experiment were comparable on those two key dimensions. In the end,
this process produced a sample of 682 donors, with an average of $3,070 in political donations in
2012, according to the FEC. Ninety-one percent had donated $200 or more, 80% $500 or more, and
45% $1,000 or more during that year. For inclusion in the representative sample of U.S. adults, the
individuals in our donor sample were weighted heavily downward through YouGov’s standard
demographic weighting process, as donors tend to quite different (more likely to be white, wealthier,
etc.) than the average American.

*Undergraduate Sample*

Our third sample is a large group of U.S. undergraduates. While convenience samples of
college students can be useful for the experimental study of many topics and have been found to be
a reasonable substitute for general population samples of many topics (Druckman and Kam 2011),
there are legitimate reasons to question the degree to which gender bias specifically might involve
systematic generational differences that could render that approach inappropriate. But this is a study
for which the next generation of college-educated adults are the specific target population of
interest, given our focus on campaign activism and electoral confidence. Thus, we focus part of our
analysis on undergraduates for substantive, not simply convenience or cost-saving, reasons.

Our undergraduate sample consists of 886 students from a wide range of colleges and
universities across the U.S. Many were in the large political science courses of the many very

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20 In particular, we used separate sample replicates for female Republicans, male Republicans, female Democrats, and
male Democrats, along with sequential cell assignment for respondents from each of those groups (i.e., the first male
Republican respondent is randomly assigned to a cell – for example, the second cell of an experiment – and then next
male Republican respondent is randomly assigned to one of the remaining cells, until every cell has a Republican male
respondent in it, and then the cell assignment process for male Republicans starts again). This is a way of guaranteeing
evenly matched experimental cells on critical dimensions without compromising the principals of randomization.
21 We offered relatively generous incentives for this study: a drawing for an iPad Air combined with a drawing for 30
Amazon gift certificates worth $35 each.
generous colleagues who agreed to circulate our study (some were from other fields such as business or psychology). Students from 28 different colleges and universities participated, and no single institution accounted for more than 16% of the total sample, assuring us a far more diverse subject pool of undergraduates – geographically, demographically, and politically – than is normally used. In the end, 51% of our sample was comprised of women. Twenty-eight percent of respondents identified as Republicans, 31% independents, and 41% Democrats, roughly reflecting the leftward skew we might expect from a population of U.S. college students in this era.

Comparing the Three Samples

Table A1 in Appendix A (in the Supplementary Materials) shows that our samples differ from each other in expected ways. Donors are vastly wealthier than the average American, are vastly more engaged in politics, and are more strongly partisan than members of the general public and college students. Moreover, using a control group of respondents we ran through the conditions without any discussion of candidate gender and viability, Table A2 in Appendix A demonstrates that the political participation of male and female respondents differs in the manner predicted by prior literature. That provides an additional face validity check of our data, while also reinforcing the importance of identifying and eliminating any deterrents to women running for office, where possible.

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22 We are deeply indebted to the many scholars who circulated the survey to students at the following institutions (listed in order of the number of completed surveys received from each): Dartmouth College, George Washington University, University of Virginia, Syracuse University, Louisiana State University, Ohio State University, George Mason University, University of Northern Iowa, University of Wisconsin – Madison, Kansas State University, University of Nebraska-Lincoln, Tufts University, Auburn University, University of Georgia, Wichita State University, Brown University, Catholic University, Georgetown University, Ramapo College of New Jersey, University of California Los Angeles, American University, Duke University, University of Maryland, College Park, Tulane University, University of South Florida St. Petersburg, Washington State University, Providence College, and University of Arkansas Little Rock.

23 Additionally, undergraduates are far more likely than the general public to want to talk about politics; despite that, they are only slightly more interested than the general public in learning about it by following the news about politics. While disappointing, it, too, has some face validity to it.

24 The face validity of our samples can also be assessed by looking at the differences for male and female respondents. Using one-way ANOVA with respondent gender as the only factor, Table A2 in Appendix A (in the Supplementary Materials) displays the means for men and women from each of the different samples across all of the key dependent variables (where scores are averaged across the several experimental conditions) and whether the differences between
Treatments

Each sample answered a virtually identical survey, with just a few differences in each version. For example, we did not ask undergraduates whether they would donate their own money to a political candidate, given most college students’ limited financial resources. Because we are interested in the effects of media portrayals of female candidates’ fortunes, we embedded an experiment in each survey. Each respondent was randomly assigned to one of several experimental treatments in which they were exposed to news coverage of a congressional race involving a female candidate.

Our analysis focuses on the results of three experimental treatments, in which a female candidate was portrayed in a news story as (1) facing a disadvantage because of her gender, (2) facing neither an advantage nor disadvantage because of her gender, or (3) experiencing an advantage because of her gender. We refer to these respectively as the Disadvantage, Parity, and Advantage treatments. The Advantage portrayal does not occur often in actual news coverage of campaigns, but it provides us with theoretical leverage. In particular, it allows us to examine our “underdog” argument more carefully, since it would imply that male candidates might benefit when female candidates are portrayed as holding an advantage because of their gender. Nonetheless, our emphasis in most of the analysis is on the effects of the Disadvantage treatment, given its relative prominence in actual news coverage.

All respondents in both samples read a news article headlined “Primary Results Set Up Race for U.S. House Seat between State Legislators.” The article described an upcoming general election race for an open U.S. House seat between two candidates, Amy Haskins and Mark Johnson. Haskins men versus women are significantly different on each of those measures. In short, it demonstrates that our samples yielded roughly the types of differences between men and women we would expect, based on well-established findings in the field (i.e., women have significantly lower electoral confidence than men, women are inclined to donate significantly less than men, and so forth).

25 The experiment also included a true control group, in which respondents received no information about whether the female candidate was disadvantaged, advantaged, or neither. In addition, a final experimental treatment reflected what we consider a “muddled” portrayal of female candidates’ fortunes. Because our focus here is on the public responds when candidate gender is discussed directly in the news, we do not focus on the results of those conditions in this paper.
is described a member of the State Assembly and small business owner, who won the Democratic/Republican party nomination in the recent primary. Johnson is described as a former district attorney and current state legislator, who won the Republican/Democratic nomination. The story contains a description of the race, with comments by party leaders about each of the candidates and their (not-clearly-partisan) issue positions. The news article ends with, “With the majority party of the U.S. Congress hanging in the balance, this race is being watched closely at the national level as well as within the state.” An example of the news story as respondents saw it appears in Appendix B of the Supplementary Materials.

In each of the three experimental treatments, the story was revised to reflect a different portrayal of Haskins’ prospects. We accomplished this through revisions to the subhead that appeared directly beneath the main headline, a paragraph discussing whether or how being a woman would affect Haskins’ chances of winning, and a quote from a political analyst. In the Disadvantage condition, Haskins was described as facing electoral disadvantage because she is a woman. In the Parity condition, Haskins was described as neither benefiting nor being harmed electorally by her gender. And in the Advantage treatment, she was described as benefiting by being a woman. In Table 1, we present the key variations to the story’s subhead and two key paragraphs. Our focus is whether these different portrayals of a female candidate’s prospects, because of her gender, lead to different attitudes and behavior among respondents.

Because partisanship dominates voting in general elections, we measure how our treatments affect a natural inclination toward the candidate of one’s own party. In all of the treatments, a female candidate (Haskins) is running against a male candidate (Johnson.) Without priors about how Democrats and Republicans would respond differently, our goal was to hold partisan affinity with the candidate constant to remove any potential for confounds on that front. Thus, we encouraged a
preference for the female candidate by assigning Haskins the party affiliation expressed by the respondent at the start of the survey; Johnson was assigned the opposite party affiliation. For independents in the nationally representative and undergraduate studies, we randomly assigned Haskins’ partisanship (independents were excluded from the donor study).26

Results

All of the findings reported in the sections that follow are presented in Tables 2 and 3. In Table 2, we present two-way ANOVA results, including means, for the main treatment effect – the portrayal of the female candidate as facing a disadvantage, holding an advantage, or at parity with her male opponent. In Table 3, we present the results for an interaction between the portrayal and respondent gender. This allows us to determine whether respondent gender moderates our treatment effects. While this is not the focus of most of our analysis, it strikes us as essential in a study of gender to determine whether male and female respondents react differently when exposed to media coverage. In each table, the first row shows the sample in question for each analysis, and the second row displays the dependent variable in question.

[Table 2 and Table 3]

Electoral Support

We begin by looking at the effect of portrayals of female candidates’ fortunes on support for the female candidate in our general population sample. After reading the news article, respondents were asked about their relative preference for candidates; through a series of branching questions, respondents could indicate anything from an “extremely strong” preference for Mark Johnson, which was coded 1, to an “extremely strong” preference for Amy Haskins, which was coded 9 (see Appendix C in the Supplementary Materials for the question wording and scale for every question mentioned in this study). We use continuous measures of relative candidate support rather than a

26 Although random assignment helps to achieve the same end, quotas were set so that an equal number of Republicans and Democrats were assigned to each condition, such that even random variations in partisanship between conditions could not affect our results.
vote choice question because we designed the experiment so that Haskins shares the partisanship with the respondent (except for independents, for whom her partisanship is randomly assigned). Given the power of party identification, Haskins will almost always be preferred over Johnson. The question of interest is whether the degree of support for Haskins varies across treatments, which can be gauged by our continuous measure.

In the first column of Table 2, we present the mean levels of electoral support for the full sample for each experimental condition. As expected, we find that a new story portraying a female candidate as facing a disadvantage boosts her support. With ANOVA, we find a main effect for treatment condition ($f=11.05$, $p<.05$). Compared to both the Parity and Advantage treatments, support is, on average, statistically higher among respondents in the Disadvantage condition.

But where does that effect come from? We hypothesized that voters may express support for a female candidate because of an “underdog” effect, rallying to support a politician who is portrayed as facing an uphill battle. If that is the case, and if it is a general pattern rather than one tied to women candidates only, we should then see relative support for the male candidate increase between the Parity and Disadvantage conditions, given that the male candidate would be the underdog in our Advantage condition. On that front, the results appear to be directionally consistent with that theory, although the difference is not statistically significant ($p=.18$). So we cannot say definitively that the “underdog” dynamic is the mechanism that explains our results, but it is clear that portraying a female candidate as facing gender bias is advantageous for her.

We also can explore the possibility that it might only be women are driving that dynamic, perhaps as the result of an increase in gender consciousness (although there is little recent literature on gender affinity effects that would suggest that would be the case). With an $f=3.86$ ($p=.02$) for the interaction between treatment and respondent gender, Table 3 does show that there are significant gender differences; however, the results do not suggest that gender consciousness among women
plays a role. In fact, the results for men – where a Disadvantage portrayal significantly increases the electoral support of male respondents over a Parity portrayal – is what we would expect to see for female respondents if gender consciousness was at issue. Instead, the pattern suggests that female respondents penalize the female candidate in the Advantage treatment; in contrast, the difference between the Disadvantage and Parity conditions is not notable or significant. Especially given that advantage portrayals are rare in the real world, the key finding from this part of the study is that media portrayals of women as facing an electoral disadvantage – a fairly common trope in news coverage of American politics – can prove beneficial for female candidates by boosting their support relative to a male opponent, compared to reporting that there is gender parity in political campaigns.

Campaign Activism

As we noted, increased support may not be only way that pessimistic news about gender bias could benefit individual female candidates. Such portrayals could also help female candidates recruit volunteers and encourage individuals to engage in campaign activism on their behalf. Because volunteers tend to come disproportionately from young people and college students, we focus here on the treatment effects among our national sample of undergraduates.

Our dependent variable is an index built from a series of questions about a respondent’s likelihood of volunteering on each candidate’s campaign, talking to others to convince them to vote, and helping to raise money for the campaign. We added the values of the measures for the three items for each candidate, then subtracted the score for Mark Johnson from that of Amy Haskins. That resulted in a “net activism” index, ranging from –18 (i.e., maximum activity for Johnson and none for Haskins) to +18 (i.e., maximum activity for Amy Haskins, and none for Johnson).\(^\text{27}\)

\(^\text{27}\) The mean score was 4.2, which shows that respondents tended to express more activism in favor of Haskins, which is to be expected since she shares the partisan affiliation with most respondents. The mean score for Haskins is 11.1 (with 6% of respondents registering the lowest activism score of 3) and for Johnson it is 6.9 (with 34% of respondents indicating the lowest activism score of 3.)
In the second-to-last column of Table 2, we present the mean net activism index scores for the full sample of undergraduates. Again, portraying Haskins as facing bias helps her campaign. On average, net activism in Haskins’ favor is highest in the Disadvantage treatment (mean = 5.2) compared to the Parity (3.8) and Advantage (3.4) conditions. In an ANOVA analysis, we find a main effect for treatment condition (f=8.46, p<.05).

With respect to the interaction with gender, we find similar results to those in our analysis of electoral support with our nationally representative sample, albeit at levels just shy of conventional statistical significance. For both young women and young men, net campaign activism on behalf of Haskins is highest in the Disadvantage condition. For women, it is higher in the Disadvantage condition than in the Advantage condition; for men, net activism is higher in the Disadvantage condition than in both other conditions. However, the interaction between treatment and gender falls just shy of conventional significance levels (f=2.64, p=.07), so our main conclusion is that the treatment has a significant average effect.

Taken as a whole, these results suggest that when female candidates are portrayed as facing gender bias, this may lead young people to be engaged in campaign activity that favors a female candidate of their own party as compared to other types of portrayals of female candidates’ fortunes.\textsuperscript{28} Just as with the findings for electoral support, the suggestion that a candidate is facing gender bias can be beneficial for women running for office.

\textit{Campaign Contributions}

While we expected that women might gain support from voters and potential volunteers when media coverage portrayed them as facing gender bias, we suspected that it would be less likely

\textsuperscript{28} A look at Table A1 in Appendix A (Supplementary Materials) reveals that donors express even higher activism intentions, which is not surprising, given that they are politically active elites. While the means for donors run directionally in accordance with the undergraduate results, none of the differences achieve statistical significance. Regardless, while elites are more likely to express activism intentions, there are relatively few of them in the population at large, so our focus should stay on the young people who form the bulk of on-the-ground campaign activists.
when it comes to fundraising. This is largely because donors are likely to possess more well-formed attitudes and preferences, and thus be less subject to the kind of information effects that our experiment is designed to produce. But because campaign consultants and organizations frequently rely claims of gender bias in an effort to raise money, this is an important hypothesis to test.

In our survey of campaign donors, we utilized several different dependent variables to assess their propensity to give money to a candidate. We asked about their likelihood of donating their own money to Haskins’ campaign and how much they would give. To minimize the noise introduced by the fact that donors may have radically different incomes, which might then affect their stated donation amounts, we also asked how much they would donate to the candidates and/or a charity of their choice if we gave them $500. Even though a “found money” scenario would not be likely to occur in the real world, it provides a secondary way of examining inclinations to donate while eliminating variation introduced by other factors.29

It should be noted that we asked all of the same questions with respect to Johnson, the male candidate, as well. But unsurprisingly, donors are quite loyal to their party; because we designed the survey so that respondents never share the party affiliation of Johnson, his donation totals were so low as to be irrelevant. Thus, we analyze the donation data for Haskins rather than focusing on differences between the candidates.

Are female candidates who are portrayed as facing gender bias likely to get more campaign funding than those who are portrayed as being at parity with male candidates? The short answer is no. Table 2 reveals that when we compare respondents in the Parity and Disadvantage treatments

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29 This approach has sometimes been used in dictator and trust-related games to emulate people’s willingness to spend on behalf of a cause, while (effectively) holding income differences constant across individuals (see, for example, Berg, Dickhaut, and McCabe 2007; Iyengar and Westwood 2015; Whitt and Wilson 2007.) It is not entirely comparable to our approach, as the trust games often involve a small pool of actual money (usually $1-$10), which an individual can either keep in real life, or spend in the game. In contrast, we use a large pool of hypothetical money to be distributed between a candidate and a charity. With U.S. campaigns involving somewhere between thousands and millions of dollars, it would not have been possible to use enough real money that the money would ever be seen to have more real-world utility for a candidate’s campaign than for the respondent him or herself.
(setting aside the less realistic Advantage treatment), the portrayal of the female candidate’s chances
does not produce a difference in donation totals across any of our variables. There are no significant
differences between those two groups when we focus on the main effect of the treatments alone,
and there are no interactions in Table 3 between the treatment and respondent gender. Unlike
ordinary voters, donors do not run to the aid of female candidates when they are portrayed as
underdogs.

It is important to note that the lack of differences among donors go beyond monetary
variables. Bolstering our theoretical argument, the results for candidate preference also suggest that
donors are simply less affected by media coverage than voters in general. Whereas we saw that U.S.
adults considered as a whole were more likely to support Haskins when she was portrayed as facing
gender bias, Haskins’ support among campaign donors is unchanged regardless of experimental
condition (the means range from just 8.0-8.2, and none of the differences are significant). Of course,
ceiling effects likely are playing a role, considering that the maximum score was 9 on the preference
scale. But regardless, these results provide no evidence that donors are more likely to support a
female underdog.30

An examination of the Advantage portrayal, however, shows that donors are not entirely
immune from the news coverage of gender issues. When Haskins is portrayed as having an
advantage due to her gender, the perceived likelihood of donating drops significantly as compared to
the Disadvantage treatment. In addition, the amount to be donated when the respondent is given a
theoretical $500 to donate drops significantly (relative to the Disadvantage condition only; Parity is
not quite different enough to register as significant). Despite those differences, it is important to
note that the money does not flow to the male opponent; it is only that more is donated to charity.

30 We also asked about perceptions of the candidate’s likelihood of winning, also on a 9-point scale. Among donors, the
results suggest a rational response (6.6 in favor of Amy Haskins in the advantage portrayal vs. 5.9 in the parity portrayal
and 5.5 in the disadvantage portrayal.) That suggests donors are assessing the playing field in a reasonably strategic way.
Moreover, there are no significant differences when donors are asked about spending their own money, a more realistic scenario. But it does suggest that in the rare scenario where candidates are portrayed as benefitting from being a woman, there is a possibility that donors could have a reaction that would not necessarily benefit the female candidate.

**Electoral Confidence**

The findings thus far indicate that pessimistic portrayals of barriers faced by female candidates can provide short-term gains for women running for office, and that could certainly help to explain why such portrayals continue to proliferate in political discourse. It also does not appear to hurt their fundraising in any way. But we also need to consider whether these frames could have longer-term consequences that could augur less favorably for increasing the representation of women in the future. This is especially important given the claims that media portrayals of bias against women could continue to perpetuate a gender gap in political ambition (e.g., Dowling and Miller 2015; Hayes and Lawless 2016). Our question is whether media coverage that emphasizes gender bias leads young women to become less confident in their ability to run a political campaign.

In our study of undergraduates, we included two measures of electoral confidence, asking respondents after they had been exposed to the treatment whether they agreed with each of two statements: “If I ran for office, I would be able to raise enough money from others for my campaign” and “Someone like me would be likely to win a congressional seat if they ran for office.” Respondents could choose a response from 1 (“Strongly disagree”) to 7 (“Strongly agree”), and we summed these measures to create an additive scale ranging from 2 to 14. Higher scores indicate more confidence in the ability someone like themselves to successfully run a future campaign.

With respect to the treatment effect alone, we see in Table 2 that the type of news portrayal of women’s fortunes produces no significant difference ($f=.56, p=.57$). That is unsurprising; we would not expect men to lose confidence in light of information that women face electoral
challenges. When we consider the interaction between respondent gender and portrayal, however, we see the expected relationship. Table 3 shows that the interaction between gender and treatment condition is significant ($f=6.59$, $p<.05$), suggesting that exposure to portrayals of women as facing electoral bias has a different effect on young women than it does on young men. Electoral confidence among young women is lowest in the Disadvantage condition, which is significantly different from the Parity condition. Among men, a suggestive 0.6 movement upwards in the opposite direction from Parity to Disadvantage falls short of conventional significance levels ($p=.18$). But the direction of the movement suggests, intuitively, that young men become more confident in their prospects when they hear that a female candidate would face a systematic disadvantage because of her gender.

Given the countervailing directional movement for men versus women, the end result of portraying the electoral playing field as level is rather stunning. A substantial 1.6-point gender gap in electoral confidence between young men and young women in the Disadvantage treatment is eliminated entirely in the Parity condition. That is especially meaningful in light of the fact that we find a 1.1-point difference when we ran a group of undergraduates through a control condition, with no explicitly gendered content in the article. When undergraduates are shown coverage with an emphasis on men and women candidates being at parity, that pre-existing difference on electoral confidence can be eliminated entirely. Especially in conjunction with Dowling and Miller’s (2015) findings that messages about a lack of gender bias tend to “stick” for a considerable amount of time after exposure, that is quite a powerful finding. To the degree that electoral confidence is a precursor to a willingness to run for office, our results suggest that overly pessimistic discussions of disadvantages facing female candidates may reduce the odds of some women throwing their hats into the ring. If that is the case, conventional media coverage of women in politics will continue to make it difficult to close the gender gap in political ambition.
Conclusion

Our findings suggest that media coverage claiming that women face gender bias on the campaign trail will not hurt female candidates’ bids for office – in fact, it will likely help them. The advantage operates not by increasing campaign donations, but by generating higher levels of support from voters and increasing campaign activism on behalf of the female candidate. These results suggest that one consequence of an emphasis on gender bias in elections rather than on electoral parity may be to help women run more effective and more successful campaigns.

But paradoxically, we also found that those same messages reduce young women’s confidence in their ability to mount an effective campaign themselves, likely lowering their likelihood of eventually running for office. In contrast, a message of gender parity – coverage that describes an electoral playing field that is level, a portrayal consistent with the existing research – can eliminate the gender gap in young women’s perceptions of their own electoral viability. Hearing that female candidates have just as good of a chance of winning elections as men gives young women the electoral confidence that is a precursor to actually entering politics.

Although our experiment focused on general elections, we think these results likely apply to primary contests as well. In fact, general elections constitute a “hard case” for persuasion, especially since our experiment was designed so that partisan (and partisan leaning) respondents read about a female candidate who shared their party affiliation. Without the anchor of partisanship in a primary election, claims of gender bias might even lead more voters and volunteers to run the aid of a female candidate. Donors, too, might be somewhat more likely to alter their behavior in light of media messages. Of course, because donors are likely to behave more strategically than other citizens, it is not clear whether they would be more likely to back a female candidate portrayed as facing gender bias, move towards the candidate with a better chance of winning, or if those tendencies would just cancel each other out. Either way, there is no theoretical reason to think that our findings about the
negative effects on young women’s electoral confidence would be any different in a primary contest. As such, we think our main findings would be likely to replicate regardless of the type of election.

More broadly, we see multiple implications of our research. First, the information environment plays a role in shaping women’s representation in the United States in both the short and long term. Because messages about gender bias benefit female candidates, this particular narrative in American politics is likely to persist for some time. One reason is that there appear to be powerful incentives for both campaigns and groups that advocate for women in politics to continue to portray the playing field as biased against female candidates. Since the short-term effects of not discussing electoral parity appear to be beneficial in some key ways – increasing female candidates’ electoral support and campaign activism, while not threatening their fundraising – why not portray gender bias as an obstacle that women in politics must surmount? Consider, for example, Hillary Clinton’s 2016 presidential bid, in which she has highlighted gender bias regularly, with numerous comments about double standards and higher standards in political life because she is a woman.31

A second reason is the tendency for the media to be drawn to stories about conflict and controversy. Crafting a narrative around gender bias in politics is a more attractive story line for most journalists than one in which gender plays little role in shaping campaign outcomes – especially when candidates themselves are emphasizing it. And because reporters’ prior beliefs about voter discrimination against female candidates may be difficult to alter, the kind of media coverage that suggests women face an uphill battle because of gender stereotypes or discrimination will likely continue to circulate in coverage of national politics.

31 For example, at the opening of the Women of the World Summit in April 2014, Clinton opened her remarks with, “The double standard is alive and well, and I think in many respects the media is principal propagator of its persistence. And I think the media needs to be more self-consciously aware of that.” See http://onpolitics.usatoday.com/2014/04/04/hillary-clinton-double-standard-women-stereotypes-media. In September 2015, Clinton told Ellen DeGeneres that, “It is just a reality that (women) are held to a higher, different double standard” See http://www.cnn.com/2015/09/08/politics/hillary-clinton-ellen-women/. In January 2016, she told DeGeneres that, “I think it still is hard being a woman running for president…If you’re forceful, you’re too forceful. If you’re not forceful, you’re not tough enough.” See http://www.thedailybeast.com/articles/2016/01/11/hillary-clinton-talks-guns-kim-kardashian-and-snl-with-ellen-degeneres.html.
For the field of political science more generally, our study reinforces that media messages can matter to different people in different ways. Had we analyzed only a standard cross-section of U.S. adults, we might have concluded simply that news stories emphasizing gender bias are beneficial for female candidates, without caveats. If we had studied only donors, we would have found that discussions of gender bias don’t matter much at all. And if we had surveyed only college students, we would have concluded that bias is largely harmful to women’s representation in the long term, while garnering more volunteers in the short term. But our more nuanced conclusions about the paradoxical effects of messages about gender bias were possible only because of our wide-ranging survey that allowed us to study all of these groups and outcomes simultaneously. In doing so, we were able to paint a comprehensive picture of the various ways that news coverage of gender bias in American elections produces fundamental short- and long-term trade-offs for women’s representation. Studying political behavior in other realms with this kind of 360-degree approach would likely produce additional novel and important insights as well.
References


<table>
<thead>
<tr>
<th>Subhead</th>
<th>Key Paragraph</th>
<th>Analyst Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disadvantage</td>
<td>Amy Haskins Likely to Face Uphill Battle as a Woman</td>
<td>Many election analysts note that Haskins is likely to experience significant disadvantages because she is a woman. Recent research has found that female candidates receive less favorable media coverage than men do. Voters also tend to prefer voting for male candidates over female candidates for public office. Moreover, researchers have found that women tend to raise significantly less money for their campaigns, which tends to give men an advantage.</td>
</tr>
<tr>
<td>Parity</td>
<td>Being a Woman Unlikely to Help or Hurt Amy Haskins</td>
<td>After years of speculation suggesting that women are at a disadvantage against male candidates, many election analysts note that Haskins is unlikely to experience much in the way of either advantages or disadvantages because she is a woman. Recent research has found that female and male candidates receive comparable media coverage. Voters also do not tend to have a preference for voting for male or female candidates for public office. Moreover, researchers have found that women tend to raise the same amount of money for their campaigns, which means neither men nor women have a fundraising advantage.</td>
</tr>
<tr>
<td>Advantage</td>
<td>Being a Woman Likely to Help Amy Haskins</td>
<td>Many election analysts note that Haskins is likely to experience significant advantages because she is a woman. Recent research has found that female candidates receive more favorable media coverage than men do. Voters also tend to prefer voting for female candidates over male candidates for public office. Moreover, researchers have found that women candidates tend to raise significantly more money for their campaigns, which tends to give women an advantage.</td>
</tr>
<tr>
<td>Electoral Support</td>
<td>Net Campaign Activism</td>
<td>Likelihood of Donating</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>RANGE: 1-9</td>
<td>RANGE: 18 to 18</td>
<td>RANGE: 1-7</td>
</tr>
<tr>
<td>1 = Prefer Johnson</td>
<td>(See Appendix, 18 = Very active for Haskins &amp; inactive for Johnson)</td>
<td>7 = Ext. Likely</td>
</tr>
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<td>9 = Prefer Haskins</td>
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<th>U.S. Adults</th>
<th>Undergrads</th>
<th>Donors</th>
<th>Donors</th>
<th>Donors</th>
<th>Undergrads</th>
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<td>F(2.481)</td>
<td>F(1.319)</td>
<td>F(2.871)</td>
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<td>p=.00***</td>
<td>p=.08*</td>
<td>p=0.27</td>
<td>p=.06*</td>
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Means (total sample)

| ADVANTAGE | 6.7 | 3.4 | 5.0 | $143 | $270 | 7.9 |
| PARITY    | 7.0 | 3.8 | 5.2 | $162 | $300 | 8.0 |
| DISADVANTAGE | 7.4 | 5.2 | 5.3 | $189 | $310 | 7.8 |

Comparisons

| PARITY vs. DISADV | p=.01*** | p=.01*** | p=.66 | p=.63 | p=.81 | p=.53 |
| ADVANTAGE vs. DISADV | p=.00*** | p=.00*** | p=.03** | p=.18 | p=.04** | p=.85 |
| ADVANTAGE vs. PARITY | p=.18 | p=.50 | p=.21 | p=.68 | p=.47 | p=.87 |

ANOVA results, using both "treatment" (shown in Table 2) and gender x treatment (shown in Table 3)

*** indicates significance at p=.01 or better; ** at .05 or better; * at .10 or better.

Note: Haskins is the female candidate.
Table 3. ANOVA Results for Effect of Respondent Gender X Treatment

<table>
<thead>
<tr>
<th>Electoral Support</th>
<th>Net Campaign Activism</th>
<th>Likelihood of Donating</th>
<th>Donation amount (own money)</th>
<th>Donation amount (out of $500)</th>
<th>Electoral Confidence</th>
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<td>U.S. Adults</td>
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<td>Donors</td>
<td>Donors</td>
<td>Donors</td>
<td>Undergrads</td>
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<tr>
<td>ANOVA</td>
<td>$F(3.86)$</td>
<td>$F(2.641)$</td>
<td>$F(2.206)$</td>
<td>$F(999)$</td>
<td>$F(1.119)$</td>
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<td>GENDER x TREATMENT</td>
<td>$p=.02^{**}$</td>
<td>$p=.07^{*}$</td>
<td>0.11</td>
<td>0.37</td>
<td>0.33</td>
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Means - MEN

<table>
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<tr>
<th>Treatment</th>
<th>Electoral Confidence</th>
<th>Net Campaign Activism</th>
<th>Likelihood of Donating</th>
<th>Donation amount (own money)</th>
<th>Donation amount (out of $500)</th>
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<tr>
<td>ADVANTAGE</td>
<td>6.9</td>
<td>3.1</td>
<td>4.7</td>
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<td>$282$</td>
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<tr>
<td>PARITY</td>
<td>6.8</td>
<td>2.6</td>
<td>5.2</td>
<td>$196$</td>
<td>$316$</td>
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<tr>
<td>DISADVANTAGE</td>
<td>7.4</td>
<td>4.8</td>
<td>5.3</td>
<td>$236$</td>
<td>$346$</td>
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Comparisons - MEN only

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<td>PARITY vs. DISADV</td>
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<tr>
<td>ADVANTAGE vs. DISADV</td>
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<td>ADVANTAGE vs. PARITY</td>
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Means - WOMEN

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Electoral Confidence</th>
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<th>Donation amount (own money)</th>
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<tr>
<td>ADVANTAGE</td>
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<td>DISADVANTAGE</td>
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Comparisons - WOMEN

<table>
<thead>
<tr>
<th>Comparison</th>
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<tr>
<td>PARITY vs. DISADV</td>
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<tr>
<td>ADVANTAGE vs. DISADV</td>
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<td>ADVANTAGE vs. PARITY</td>
<td>$p=.00^{***}$</td>
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ANOVA results, using both "treatment" (shown in Table 2) and gender x treatment (shown in Table 3) ** indicates significance at $p=.01$ or better; *** at .05 or better; * at .10 or better.

Note: Haskins is the female candidate.