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# Experimental Tests of an Attitudinal Theory of the Gender Gap in Voting

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*This research examined the hypothesis that gender gaps in voting stem from differences in the extent to which men and women agree with candidates' issue stances. Two initial experiments portraying candidates by their sex and attitudes and a third experiment that also included information about political party produced the predicted attitudinal gender-congeniality effect: Participants of each sex reported greater likelihood, compared with participants of the other sex, of voting for the candidate who endorsed positions typically favored more by their own sex than the other sex. In addition, this gender-congeniality effect was present among Republican and independent participants but absent among Democratic participants because Democratic men as well as women favored candidates who advocated the positions typically favored by women. Interpretation invoked the importance of group interest based on gender as an influence on women's voting.*

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**Keywords:** *voting; attitudes; gender; sex differences*

**G**ender gaps in voters' preferences for candidates for political offices have attracted increasing attention, especially since a substantial gap emerged in the 1996 and 2000 presidential elections. Our research examines the extent to which these gender gaps may derive from differences in male and female voters' attitudes that correspond to differences in candidates' positions on social and political issues. This attitudinal explanation of gender gaps coheres with evidence that citizens engage in policy voting, whereby one determinant of voters' preferences is their agreement with candidates' stances on important issues (see Kinder, 1998; Ottati, Wyer, Deiger, & Houston, 2002; Pratto, Stallworth, & Sidanius, 1997).

Nonetheless, because attitudinal sex differences in policy-relevant attitudes are relatively small in magnitude (Eagly & Diekmann, 2002) and voting is determined by multiple causes (Kinder, 1998; Ottati et al., 2002), it is not self-evident that these attitudinal differences are a major contributor to voting gender gaps.

Research on gender gaps in voting is important precisely because there is no general consensus on its causes, as illustrated by journalists' and social scientists' many theories. For example, appearing in the Minneapolis, Minnesota, *Star Tribune* was the opinion that women "vote their libidos" and favored Clinton because he "exudes so much power and charisma" (Osias, 1996, p. 25A), whereas the opposite view, namely, that "female voters considered issues to be more important than personality" appeared in the *New York Times* (Kohut, 2000,

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p. 27). The *New York Times* had earlier featured Carol Tavris's (1996) critique of Irving Kristol's claims in the *Wall Street Journal* that the gap reflects women's tendency to be more sentimental, risk-averse, and less competitive than men. Tavris held that the gender gap reflected women's greater responsibility for children and aging parents and their personal experience with workplace sex discrimination. In the *Chicago Tribune*, Barbara Brotman (1996) emphasized the sexes' differing symbolic predispositions, whereby the Republicans' "tough macho image" appealed to men (p. 1). Social scientists also have proposed various explanations, ranging from theories that, like ours, emphasize sex differences in attitudes (e.g., Manza & Brooks, 1998) to theories that maintain that gender gaps follow from men and women evaluating candidates on different bases or from voters making gender-stereotypic inferences about candidates' issue stances (e.g., Sapiro, 1983). These ideas illustrate the wide diversity of opinions about the causes of the gender gap.

The plausibility of the attitudinal explanation of the voting gender gap depends on the specifics of the typical sex differences in voting and in attitudes. In the United States, as in other advanced industrial societies, the voting gap typically consists of women's greater preference for candidates on the left of the political spectrum and men's correspondingly greater preference for candidates on the right (Inglehart & Norris, 2000; Seltzer, Newman, & Leighton, 1997). The attitudinal theory of this voting gap would thus be plausible for the United States to the extent that women, more than men, favor the more liberal policies that are more typical of Democratic politicians and men, more than women, favor the more conservative policies that are more typical of Republican politicians. Establishing such a trend, our research (Eagly & Diekmann, 2002) determined that the largest sex difference in the attitudinal items of the General Social Survey (GSS) (Davis & Smith, 1996) emerged on items associated with the general theme of social compassion, whereby women were more supportive than men of social provision and opposed to harsh policies across a spectrum of specific issues. This sex difference not only proved to be stable in the years that were examined (1973-1998) but also persisted when controls for sociodemographic variables were included. Although the attitudes of men and women differ in several domains (Schlesinger & Heldman, 2001; Seltzer et al., 1997), the most frequently reported and substantial sex difference is thus consistent with the attitudinal theory of the gender gap, given that socially compassionate policies are generally associated with the political left and more restrictive policies with the political right.

The results of several correlational studies of voting suggest that attitudinal differences may underlie voting

gender gaps in the United States. For example, controlling for several demographic variables, Seltzer et al. (1997) examined whether respondents' sex accounted for additional variability in voting in numerous elections once sex-related attitudinal predictors were entered in multivariate analyses. Because the addition of sex typically did not improve prediction, Seltzer et al. concluded that attitudinal sex differences accounted for the divergent voting patterns of the sexes (see also Chaney, Alvarez, & Nagler, 1998; Kaufmann & Petrocik, 1999; Manza & Brooks, 1998, 1999). However, these studies did not establish that candidates actually took positions congenial to men or women on the issues represented in these analyses or that voters were aware of candidates' positions. The attitudinal variables may have been effective in the regression analyses because they functioned as proxies for political ideology or party identification, which in turn affected voting. Therefore, to substantiate the presumed causal relations between sex differences in attitudes and voter gender gaps, our experiments ascribed female-congenial or male-congenial attitudes to a hypothetical female or male candidate. This method illustrates the consequences that can occur when voters perceive that candidates take positions congenial to men or women. In addition, our studies allow some consideration of the processes that may underlie any tendency for people to vote for candidates who express gender-congenial attitudes. One plausible theory of process is that perceived attitudinal similarity induces a positive attitude toward candidates (Byrne, 1997), which is then expressed in voting (Byrne, Bond, & Diamond, 1969).

Our first experiments were designed to determine whether attitudinal sex differences would yield gender gaps in voting under circumstances that are very favorable to producing such effects. Specifically, these experiments portrayed candidates only in terms of their sex and policy positions on four issues that were selected because they produce relatively large attitudinal sex differences. By adding information about political party in a subsequent experiment, we examined gender gaps in an informationally more complex but realistic situation in which candidates' attitudes compete with information about their political party.

In the first two experiments, a candidate for Congressional Representative who was identified as a woman or man or not identified by sex took positions on four issues. These issue stances were arrayed so that (a) all four positions were more congenial to men than women, (b) all four were more congenial to women than men, or (c) two were congenial to men and two to women. Our prediction of an attitudinal gender-congeniality effect is that participants of each sex, compared with the other sex, are more likely to vote for the candidate who takes positions favored by their own sex. Perceptions of attitu-

dinal similarity and political effectiveness should mediate voting, with candidates of both sexes gaining similarity and effectiveness among the male or female participants whose preferred positions they favor. Finally, regardless of participants' sex, perceptions of candidates' personalities are expected to follow from their attitudes, with their images becoming more communal (i.e., sensitive, warm, nurturing) when they advocate positions favored by women and more agentic (i.e., competitive, dominant, aggressive) when they advocate positions favored by men. Because information about attitudes should function as individuating information (e.g., Krueger & Rothbart, 1988), it should therefore weaken the typical gender-stereotypic inferences about personality whereby women tend to be perceived as communal and men as agentic (e.g., Diekmann & Eagly, 2000).

In our first, preliminary experiment, we surveyed 331 university students in public campus locations. Revealing the predicted attitudinal gender-congeniality effect on voting was the Participant Sex  $\times$  Candidate Attitudes interaction,  $F(2, 299) = 14.06, p < .001$ , whereby, regardless of candidates' sex, male participants reported greater likelihood than female participants of voting for the male-congenial candidate,  $p < .005$ , and female participants reported greater likelihood than male participants of voting for the female-congenial candidate,  $p < .001$ . Among the additional effects obtained were substantial increases in the ascription of communal personality characteristics to the female-congenial candidate and of agentic personality characteristics to the male-congenial candidate.

Encouraged by these results, we carried out a more elaborated experiment with older adults that incorporated measures assessing the perceived implications of the candidate's attitudes for promoting differing values and for benefiting women, men, or the participants themselves. Because of the tendency in our preliminary experiment for the male-congenial attitudes ascribed to the candidates to convey conservatism, which is associated with valuing individualism and individual initiative (Kerlinger, 1984), we expected that the participants would view these attitudes as promoting individual responsibility. Because of the tendency for female-congenial attitudes to convey liberalism, which is associated with valuing egalitarianism and governmental action to improve human welfare (Kerlinger, 1984), we expected that the participants would view these attitudes as promoting responsibility for others. Also, given that perceived group interest often underlies the policy attitudes of identity groups (Kinder, 1998; Skitka & Mullen, 2002), participants should believe that policies favored more by one sex benefit that sex. Because self-interest appears not to have a reliable impact on attitudes on policy issues

(Kinder, 1998; Skitka & Mullen, 2002), we reserved judgment on the extent to which self-interest would be related to the gender-congeniality of candidates' issue stances.

This experiment also examined the moderating effects of participants' own political party orientation. One consideration suggesting such moderation is that among the issues that produce the most substantial sex differences, the attitudes congenial to women are more liberal and therefore more oriented to the Democratic Party's positions than the attitudes congenial to men, which are more conservative and therefore oriented to the Republican Party's positions (Eagly & Diekmann, 2002). Consequently, to the extent that people identified with parties tend to prefer a candidate who is attitudinally aligned with their party, the gender-congeniality effect would erode among these participants. However, because our research has shown that women, but not men, consistently adhered to attitudes that favored the interests of their gender (Diekmann, Eagly, & Kulesa, 2002), Republican women may tend to defect from their party by not supporting conservative, male-congenial candidates, whereas Democratic men may support liberal, female-congenial candidates. By this logic, the gender-congeniality effect would be stronger among Republicans than Democrats.

## EXPERIMENT 1

### *Method*

#### *PARTICIPANTS, PROCEDURE, AND DESIGN*

The 468 participants in the pretest and experimental phases were recruited from a large metropolitan airport. Their median age was 39, and 65.4% held at least one college degree; they were 82.1% European American, 9.0% African American, 5.3% Asian American, and 3.6% other or unidentified. Among the full-time employees (72.0%) in the experimental sample, most held managerial or professional jobs (70.6%) or technical, sales, or administrative support jobs (18.8%). From among these participants, we eliminated 68 noncitizens, 4 who did not report their sex and 5 who did not follow the directions.

Student surveyors asked every fifth person sitting in a departure lounge and appearing at least 18 years old to complete a questionnaire. Those who consented (72.0% in the experimental sample) read that a hypothetical candidate for the House of Representatives had taken positions on four issues. The candidate's sex was conveyed by the terms "man" or "woman" or obscured by the term "person." Such terms appeared six times in introducing the candidate and the participant's task (e.g., "you should assume that the woman [man, person] you are reading about is a candidate for the House of Repre-

sentatives”) and eight times in the subsequent items. The resulting four-factor experiment with 112 men and 125 women yielded a 3 (candidate sex: male vs. female vs. sex not indicated)  $\times$  3 (candidate attitudes: male-congenial vs. female-congenial vs. mixed)  $\times$  2 (participant sex: male vs. female)  $\times$  3 (participant party: Republican vs. independent vs. Democratic) factorial design. Using 7-point scales, the participants responded to items assessing the dependent variables, which were analyzed in a four-factor analysis of variance (ANOVA) with a  $p$  value of .05 providing the criterion for statistical significance.

#### SELECTION OF ISSUES

A preliminary set of GSS items was chosen for greater endorsement by women (13 items) or men (10 items). These items were rated by 70 male and 84 female pretest participants for agreement or relevance of the issue for voting for a Congressional Representative. On the basis of these ratings, four items were selected as male-congenial: (a) the role of government in family life today is too large, (b) there should be less government regulation of business, (c) preschool children suffer if their mothers work, and (d) people should be allowed to express their opinions even if they are harmful or offensive to members of other religious or racial groups. Four items were selected as female-congenial: (a) the government should spend more on retirement benefits, (b) employers should make special efforts to hire and promote qualified women, (c) it should be the government’s responsibility to reduce income differences between the rich and the poor, and (d) the government should provide financial benefits for child care when both parents work. These items were selected to ensure that the sex difference in agreement with the male-congenial items,  $p < .001$ , and the female-congenial items,  $p < .001$ , was of similar magnitude. The effect sizes ( $d$ s computed as men – women) associated with these sex differences were 1.01 for the male-congenial items and  $-0.82$  for the female-congenial items. Each item had a mean rating of at least 4.00 on relevance to voting. Two sets of mixed items (half male-congenial and half female-congenial) were comprised so that all items appeared in the mixed condition.<sup>1</sup>

#### MEASURING INSTRUMENTS

*Vote.* On a scale anchored by *much less likely* and *much more likely*, the participants rated their likelihood of voting for the candidate given the attitudes that the candidate expressed.

*Perceived candidate characteristics.* On scales anchored by *very unlikely* and *very likely*, participants rated the candidate’s likelihood of possessing various characteristics. Some of these items were drawn from Diekmann and Eagly’s (2000) agentic and communal scales, and novel

items were designed to be politically relevant. Based on exploratory factor analysis (principal components with varimax rotation, followed by scree test), scales were produced by averaging the following items: (a) political effectiveness (strong leader, intelligent, respected, effective representative for your district,  $\alpha = .91$ ); (b) agentic personality (competitive, dominant, aggressive, daring;  $\alpha = .85$ ), and (c) communal personality (sympathetic, sensitive, warm, kind;  $\alpha = .91$ ). Also obtained was a rating of the similarity of the participant’s and the candidate’s attitudes.

*Beliefs about candidate’s attitudes.* Ratings on liberal and conservative (reverse-scored) scales produced a measure of candidate political ideology,  $\alpha = .93$ . Participants also rated the extent to which the candidate’s policy positions promoted the values of “taking responsibility for others” and “having people take responsibility for themselves” and benefited or harmed men, women, or the participants themselves.

*Participant attributes.* The participants reported their sex, age, and citizenship, and the surveyors recorded their visible ethnicity. In addition to the demographic items, participants indicated whether their political orientation was Democratic, Republican, independent, or other. The independent and other categories were combined in the analysis. Also, the participants’ ratings of their own likelihood of taking liberal and conservative (reverse-scored) positions, assessed on the same scales on which they rated the candidates, produced a measure of own political ideology,  $\alpha = .83$ .

#### Results

##### BELIEFS ABOUT CANDIDATE’S ATTITUDES

Our manipulation of the candidates’ attitudes provided the expected context for producing a typical gender-congeniality effect on voting. Specifically, participants believed that the female-congenial attitudes, compared with the male-congenial attitudes, (a) were more liberal and less conservative,  $p < .001$ , (b) more strongly promoted people taking responsibility for others,  $p < .001$ , (c) less strongly promoted people taking responsibility for themselves,  $p = .004$ , and (d) more strongly benefited women,  $p < .001$ , albeit did not less strongly benefit men,  $p = .58$ .

##### VOTE<sup>2</sup>

The attitudinal gender-congeniality effect emerged as a Participant Sex  $\times$  Candidate Attitudes interaction,  $F(2, 172) = 5.94$ ,  $p = .003$  (see Table 1). Thus, male participants reported greater likelihood than female participants of voting for the male-congenial candidate,  $p < .001$ ; female participants reported a marginally greater

TABLE 1: Voting: Experiment 1

Party and Sex of Participants	Candidate Attitudes					
	Male-Congenial		Female-Congenial		Mixed	
	M	SD	M	SD	M	SD
Republican	4.50	1.73	3.29	1.70	3.78	1.72
Male	5.43	1.09	2.47	1.46	4.29	1.77
Female	3.42	1.73	4.23	1.48	3.23	1.54
Independent	3.37	2.27	4.16	1.55	3.47	1.68
Male	4.55	2.16	3.79	1.76	3.07	1.33
Female	1.75	1.16	4.64	1.12	3.87	1.92
Democratic	3.37	2.27	5.21	1.22	3.44	1.85
Male	3.30	1.95	5.57	0.98	3.56	1.51
Female	3.42	1.78	5.06	1.30	3.38	2.06

NOTE: Means are on a scale ranging from 1 to 7 on which higher numbers indicate greater likelihood of voting. Cell *ns* ranged from 7 to 17.

likelihood than male participants of voting for the female-congenial candidate,  $p = .07$ .<sup>3</sup>

This gender-congeniality effect was moderated by participant party, as reflected in the triple Participant Sex  $\times$  Candidate Attitudes  $\times$  Participant Party interaction,  $F(4, 172) = 3.99$ ,  $p = .004$ . Decomposing this interaction by examining the Participant Sex  $\times$  Candidate Attitudes simple interactions (i.e., the gender-congeniality effect) within levels of participants' party yielded the strongest simple interaction among the Republican participants,  $p < .001$ , a significant interaction among the independent participants,  $p = .002$ , and no interaction among the Democratic participants,  $p = .55$ . Simple effects of participant sex within levels of candidate attitudes (and sex difference effect sizes computed as men – women) showed that, for Republicans, men, more than women, preferred the male-congenial candidate,  $p = .005$ ,  $d = 1.37$ ; women, more than men, preferred the female-congenial candidate,  $p = .009$ ,  $d = -1.16$ . For independents, men, more than women, preferred the male-congenial candidate,  $p = .002$ ,  $d = 1.47$ ; women, marginally more than men, preferred the female-congenial candidate,  $p = .07$ ,  $d = -0.54$ . For Democrats, men and women did not differ in relation to the male-congenial candidate,  $p = .26$ ,  $d = -.06$ , or the female-congenial candidate,  $p = .32$ ,  $d = .40$ .

Also significant was the Participant Party  $\times$  Candidate Attitudes interaction,  $F(4, 172) = 5.83$ ,  $p < .001$ , whereby Democratic participants were more likely to vote for the female-congenial candidate than the male-congenial or mixed candidate,  $ps < .001$ , Republican participants were more likely to vote for the male-congenial candidate than the female-congenial candidate,  $p = .004$ , or (marginally) the mixed candidate,  $p = .10$ , and independent participants were more likely to vote for the female-congenial candidate than the male-congenial candidate,  $p = .01$ , or the mixed candidate,  $p = .02$ . However, consistent with the triple Participant Sex  $\times$  Candidate Attitudes

$\times$  Participant Party interaction (see above paragraph), this double interaction was significant among male participants,  $p = .001$ , but not female participants,  $p = .22$ , who consistently supported the candidate who espoused female-congenial attitudes.

#### OTHER MEASURES

*Attitudinal similarity.* Paralleling the gender-congeniality effect on voting was the Participant Sex  $\times$  Candidate Attitudes interaction,  $F(2, 180) = 5.91$ ,  $p = .003$  (see Table 2). Thus, male participants, more than female participants, perceived the male-congenial candidate as similar,  $p < .001$ ; female participants, marginally more than male participants, perceived the female-congenial candidate as similar,  $p = .09$ . The marginal Participant Sex  $\times$  Candidate Attitudes  $\times$  Participant Party interaction,  $F(4, 180) = 2.31$ ,  $p = .06$ , also paralleled the voting results, with the gender-congeniality effect absent among Democrats. Also resembling the voting results, participants perceived similarity on the basis of their own political affiliations, as evidenced by the Participant Party  $\times$  Candidate Attitudes interaction,  $F(4, 180) = 5.86$ ,  $p < .001$ , which patterned similarly to the voting results.

*Political effectiveness.* The marginal Participant Sex  $\times$  Candidate Attitudes interaction,  $F(2, 181) = 2.18$ ,  $p = .12$ , paralleled the gender-congeniality effect in the voting results (see Table 2). In addition, participants ascribed effectiveness to the candidates on the basis of their own political affiliation, as evidenced by the Participant Party  $\times$  Candidate Attitudes interaction,  $F(4, 181) = 3.52$ ,  $p = .009$ , which also patterned similarly to the voting data.

*Perceived self-benefits.* Also resembling the gender-congeniality effect on voting, perceptions of the personal benefits that would follow from the candidate's attitudinal positions produced a Participant Sex  $\times$  Candidate Attitudes interaction,  $F(2, 181) = 4.08$ ,  $p = .02$  (see Table 2). Thus, male participants, more than female participants, perceived male-congenial attitudes as self-

TABLE 2: Other Measures: Experiment 1

Sex of Participants	Candidate Attitudes					
	Male-Congenial		Female-Congenial		Mixed	
	M	SD	M	SD	M	SD
Attitudinal similarity						
Male	4.41	2.13	3.22	1.90	3.46	1.68
Female	2.65	1.72	4.27	1.50	3.16	1.99
Overall	3.56	2.12	3.80	1.76	3.30	1.85
Political effectiveness						
Male	4.70	1.66	4.43	1.32	4.54	1.20
Female	4.04	1.47	5.21	1.00	3.96	1.65
Overall	4.38	1.60	4.87	1.21	4.23	1.48
Benefits to self						
Male	4.30	1.79	4.06	1.19	3.69	1.17
Female	3.26	1.42	4.64	1.26	4.09	1.47
Overall	3.80	1.70	4.38	1.26	3.91	1.35

NOTE: Means are on a scale ranging from 1 to 7 on which higher numbers indicate greater likelihood of each quality. Cell *n*s ranged from 33 to 46.

beneficial,  $p = .007$ , whereas the tendency of female participants, more than male participants, to perceive female-congenial attitudes as self-beneficial was nonsignificant,  $p = .16$ . In addition, as reflected in the main effect of participant party,  $F(2, 181) = 3.13$ ,  $p = .05$ , Republicans perceived more self-interest than Democrats or independents, although this effect was moderated by the candidate's attitudes, as reflected in the Participant Party  $\times$  Candidate Attitudes interaction,  $F(4, 181) = 3.58$ ,  $p = .008$ , which patterned similarly to the voting results.

*Agentic and communal personality.* Yielding the predicted main effects of candidate attitudes on agency,  $F(2, 181) = 9.01$ ,  $p < .001$ , and communion,  $F(2, 181) = 25.02$ ,  $p < .001$ , (a) male-congenial attitudes conferred more agency than female-congenial attitudes or mixed attitudes, which conferred more agency than female-congenial attitudes,  $p$ s = .003 or smaller, whereas (b) female-congenial attitudes conferred more communion than male-congenial attitudes or mixed attitudes, which conferred more communion than male-congenial attitudes,  $p$ s < .001 or smaller. Also, female participants perceived the candidate as more agentic than did male participants,  $F(1, 181) = 3.83$ ,  $p = .05$ , and male participants perceived the candidate as more communal than did female participants,  $F(1, 181) = 5.77$ ,  $p = .02$ .

### Discussion

This experiment, conducted with adults sampled at an airport, yielded the predicted gender gaps in voting. Likelihood of voting thus showed an attitudinal gender-congeniality effect by which candidates' female-congenial attitudes produced a gender gap in the female direction, male-congenial attitudes produced a gap in the male direction, and a mix of these two types of attitudes did

not produce a gap. Both of our experiments established favorable circumstances for obtaining this effect given that participants received only information about candidate's sex and attitudes. Moreover, as expected, the female-congenial attitudes conveyed a more liberal ideology, support for encouraging people take responsibility for others, and benefits to women as a group, whereas the male-congenial attitudes conveyed a more conservative ideology and support for encouraging people to take care of themselves (although not greater benefits to men as a group).

This gender-congeniality effect varied by participants' political party: The effect was very strong among Republicans, somewhat weaker among independents, and absent among Democrats. The Democratic men departed from gender congeniality by favoring the candidates who endorsed the more liberal, female-congenial positions. The Republican women did not reciprocate this pattern of party loyalty by favoring candidates who endorsed the more conservative, male-congenial positions but instead, similar to other women, favored candidates who endorsed the more liberal, female-congenial positions.

These interesting trends are consistent with other findings in our research program on the attitudes of men and women. Specifically, in our study on differences between men's and women's responses on the attitudinal items of the GSS (Eagly & Diekmann, 2002), the tendency for women, more than men, to endorse the socially compassionate policies associated with the political left became smaller to the extent that participants reported themselves more liberal and less conservative. In addition, in studies examining people's accuracy in predicting the attitudes of women and men (Diekmann et al., 2002), women's attitudes on the GSS were corre-

lated with the extent to which participants believed that these items favored women's interests, whereas men's attitudes were uncorrelated with the extent to which participants believed that these items favored men's interests. Women, but not men, thus consistently adhered to attitudes that favored the interests of their gender. Similarly, in the present experiment, women consistently favored the female-congenial candidate, whereas men did not consistently favor the male-congenial candidate.

The experiment included two dependent variables that we anticipated would, similar to voting, yield gender-congeniality effects, namely, perceptions of attitudinal similarity and political effectiveness. The anticipated pattern was present on attitudinal similarity, although marginal on political effectiveness. In addition, the weakening of the gender-congeniality effects among the Democrats, which was clear-cut in the voting data, was a near-significant effect on attitudinal similarity. Therefore, it is likely that the tendency of Democratic men to vote for female-congenial candidates is at least partially a product of their own tendency to hold relatively female-congenial attitudes.

As expected, perceptions of the personality characteristics of the candidates did not resemble the voting findings. Instead, attitudes congenial to men conferred agentic personality characteristics on the candidate, and attitudes congenial to women conferred communal characteristics. In agreement with other evidence that individuating information can lessen or dispel gender stereotyping of politicians (Huddy & Capelos, 2002), perceptions of the female and male candidates did not differ. Also, consistent with actual elections (Seltzer et al., 1997), male and female candidates were equally successful overall. Moreover, in the presence of information about candidates' attitudes, their sex did not influence participants' voting. The absence of any tendency for participants to prefer candidates of their own sex contrasts with data on U.S. elections, which yields weak trends toward voters favoring candidates of their own sex (Plutzer & Zipp, 1996; Seltzer et al., 1997). These trends may reflect a tendency for candidates to take positions congenial to their own gender. However, a gender-matching preference for candidates of one's own gender (i.e., Participant Sex  $\times$  Candidate Sex interaction) might have emerged on voting when the gender-congeniality of the candidate's attitudes was not clear, that is, in the mixed attitudes condition of the present experiment. Indeed, the gender-matching Participant Sex  $\times$  Candidate Sex interaction attained significance only within the mixed attitude condition,  $F(2, 210) = 3.39, p = .04$ . Thus, with mixed candidate attitudes, women, marginally more than men, voted for the female candidate,  $p = .10$ , and men, more than women, voted for the male candidate,  $p = .04$ . However, the voting findings in this

mixed attitude condition did not differ sufficiently from those in the other two candidate attitudes conditions that the Participant Sex  $\times$  Candidate Sex  $\times$  Candidate Attitudes interaction attained significance.

Although the findings of this experiment were favorable to our hypothesis that attitudinal sex differences underlie voting gender gaps, the design involved presenting participants with information about candidates' attitudes without disclosure of their political party. Therefore, to achieve a more ecologically valid presentation, we carried out an experiment with a larger design in which we gave participants information about the candidates' political party as well as their sex and attitudes. Information about political party should guide participants' inferences about the candidate's likely issue stances and therefore influence their vote. We expected that the attitudinal gender-congeniality effect on voting would still be evident in the presence of the political party cue, although its strength would be diminished because voting also would be guided by the candidates' political party (Skitka & Robideau, 1997).

## EXPERIMENT 2

### *Method*

#### *PARTICIPANTS, PROCEDURE, AND DESIGN*

The participants in the pretest and experimental phases were 352 students randomly selected from public settings on the campus of a private university (with a 72.0% rate of consenting in the experimental phase) and 392 students from a public university who participated in groups in a laboratory setting in return for partial course credit.<sup>4</sup> For the experimental phase, the sample had a median age of 19 years and was 58.0% European American, 6.0% African American, 14.0% Asian American, and 22.2% other or unidentified. From among all participants, we eliminated 60 noncitizens and 80 people who failed to remember the candidate's sex or party.<sup>5</sup>

The Experiment 1 items were used to communicate male-congenial and female-congenial attitudes. Pretesting of these items with 71 men and 69 women from the two universities produced agreement sex differences similar to those of Experiment 1's pretest, except that agreement was somewhat greater overall with the female-congenial than the male-congenial items,  $p < .001$ . The sex of the candidate was conveyed by the terms "man" or "woman," appropriate pronouns, and the names of Karen Johnson or Brian Johnson. These first names had been matched by Kasof (1993) for perceived attractiveness, competence, and age. Political party was conveyed by a statement that the candidate was running as a Democrat or a Republican.

To determine whether the attitudinal gender-congeniality effect would replicate in this participant population without information about the candidate's political party, additional pretesting with 60 men and 77 women from the two universities consisted of an experiment with a 2 (candidate sex: male vs. female)  $\times$  2 (candidate attitudes: male-congenial vs. female-congenial)  $\times$  2 (participant sex: male vs. female)  $\times$  3 (participant party: Republican, independent, or Democrat) factorial design. In this design, which omitted Experiment 1's conditions with mixed attitudes and unknown candidate sex, the critical attitudinal gender-congeniality effect was again significant on voting, as indexed by the Participant Sex  $\times$  Candidate Attitudes interaction,  $F(1, 111) = 4.17, p = .02$ , as was the Participant Sex  $\times$  Candidate Attitudes  $\times$  Participant Party interaction,  $F(2, 111) = 3.79, p = .03$ .

The experiment presenting candidates' attitudes and political party also omitted the Experiment 1 conditions with the mixed attitudes and the candidate of unknown sex. The resulting five-factor experiment with 98 men and 102 women was a 2 (candidate sex: male vs. female)  $\times$  2 (candidate attitudes: male-congenial vs. female-congenial)  $\times$  2 (candidate party: Republican vs. Democratic)  $\times$  2 (participant sex: male vs. female)  $\times$  3 (participant party: Republican vs. independent vs. Democratic) factorial design. To assess the effects of candidate party in the absence of information about candidate attitudes, an additional 58 men and 69 women participated in a four-factor design that differed only in the omission of the information about the candidate's attitudes. These two designs were separately analyzed by appropriate ANOVAs.

#### MEASURING INSTRUMENTS

*Vote.* To achieve a more reliable measure of voting, responses were averaged over two items,  $\alpha = .94$ . One was anchored by *definitely not support* and *definitely support* and the other by *definitely not vote for* and *definitely vote for*.

*Other measures.* Experiment 1's measures were amplified by a measure of likability, which was intended to assess attitude toward the candidate ("How likely would you be to enjoy *spending time or having a conversation* with this candidate?"). The items assessing the candidate's perceived characteristics yielded measures of (a) political effectiveness ( $\alpha = .74$ ), (b) agentic personality ( $\alpha = .79$ ), and (c) communal personality ( $\alpha = .92$ ). The two items assessing the candidate's perceived political ideology were again included,  $\alpha = .89$ .

Measures of participants' attributes included Experiment 1's measure of own political ideology,  $\alpha = .88$ , for the two items. After completing the demographic items, participants were asked to indicate the political party

and sex of the candidate without referring back to the first page of the questionnaire.

#### Results

To establish that a candidate's political party influenced voting in the absence of attitudinal information, we first present the voting results from the design that omitted information about the candidate's attitudes. Then, with the full design, we examine how the candidate's attitudes influenced voting in the presence of party information. For this design, we report results on other dependent variables but omit reports on beliefs about the candidate's attitudes (specifically, perceived liberalism-conservatism, values promoted, and benefits to women or men). These omitted findings replicated Experiment 1's effects, except that the tendency for male-congenial attitudes to be perceived as yielding more benefits to men than the female-congenial attitudes, which was nonsignificant in Experiment 1, was significant,  $p < .001$ . Interactions with candidate sex are not reported for either design because only one unpredicted interaction was significant.

#### VOTE BASED ON THE CANDIDATE'S SEX AND POLITICAL PARTY

Without information about the candidate's attitudes, participants were more likely to vote for the candidate from their own political party, as reflected in the party-matching Participant Party  $\times$  Candidate Party interaction,  $F(2, 100) = 20.00, p < .001$ . Simple effects analyses showed that Democratic participants were more likely to vote for the Democratic candidate ( $M = 4.43, SD = 0.81$ ) than the Republican candidate ( $M = 2.73, SD = 0.91$ ),  $p < .001$ , and Republican participants were more likely to vote for the Republican candidate ( $M = 4.55, SD = 1.58$ ) than the Democratic candidate ( $M = 2.94, SD = 1.13$ ),  $p < .001$ . Independent participants voted equally for the Republican candidate ( $M = 3.37, SD = 0.84$ ) and the Democratic candidate ( $M = 3.76, SD = 0.90$ ),  $p = .57$ . The participant party effect sizes ( $d$ s computed as Democratic participants – Republican participants) were 1.42 for the Democratic candidate and  $-1.40$  for the Republican candidate.

#### VOTE BASED ON THE CANDIDATE'S SEX, POLITICAL PARTY, AND ATTITUDES<sup>6</sup>

The design in which participants had information about the candidate's sex, political party, and attitudes produced a different pattern of results (see Table 3 for means). The party-matching Participant Party  $\times$  Candidate Party interaction was not significant. Instead, replicating Experiment 1, the Participant Sex  $\times$  Candidate Attitudes interaction, signaling attitudinal gender congeniality, was significant,  $F(1, 151) = 9.81, p < .001$ . Thus, male participants reported greater likelihood than

**TABLE 3: Voting: Experiment 2**

Party and Sex of Participants	Candidate Attitudes			
	Male-Congenial		Female-Congenial	
	M	SD	M	SD
Republican	3.85	1.28	3.40	1.44
Male	4.54	1.03	2.62	1.39
Female	3.11	1.12	4.03	1.18
Independent	3.01	1.20	4.15	1.29
Male	3.35	1.34	3.88	1.41
Female	2.79	1.07	4.60	0.97
Democratic	3.03	1.41	4.38	1.14
Male	3.00	1.00	4.61	1.18
Female	3.07	1.78	4.19	1.11

NOTE: Means are on a scale ranging from 1 to 7 on which higher numbers indicate greater likelihood of voting. Cell *n*s ranged from 13 to 24.

female participants of voting for the male-congenial candidate,  $p = .004$ ; female participants reported greater likelihood than male participants of voting for the female-congenial candidate,  $p = .02$ .

Also replicating Experiment 1, this gender-congeniality effect was moderated by participant party, as reflected in the triple Participant Sex  $\times$  Candidate Attitudes  $\times$  Participant Party interaction,  $F(2, 151) = 4.48$ ,  $p = .01$ . Decomposing this triple interaction by examining the Participant Sex  $\times$  Candidate Attitudes simple interactions (i.e., the gender-congeniality effect) within levels of participants' party showed that this interaction was significant among Republican participants,  $p < .001$ , and independent participants,  $p = .04$ , but not among Democratic participants,  $p = .68$ . Simple effects of participant sex within levels of candidate attitudes (and sex difference effect sizes computed as men – women) showed that for Republican participants, men, more than women, preferred the male-congenial candidate,  $p < .005$ ,  $d = 1.28$ , and women, more than men, preferred the female-congenial candidate,  $p < .005$ ,  $d = -1.08$ . For independent participants, women, marginally more than men, preferred the female-congenial candidate,  $p = .08$ ,  $d = -0.56$ , and men, nonsignificantly more than women, preferred the male-congenial candidate,  $p = .16$ ,  $d = 0.47$ . For Democrats, men and women did not differ in relation to the male-congenial candidate,  $p = .98$ ,  $d = -0.04$ , or the female-congenial candidate,  $p = .45$ ,  $d = 0.36$ .

Also replicating Experiment 1 was the Participant Party  $\times$  Candidate Attitudes interaction,  $F(2, 151) = 7.78$ ,  $p < .001$ . This interaction reflected the greater likelihood of voting for the female-congenial candidate than the male-congenial candidate among Democrats and independents,  $p$ s  $< .001$ , although the greater likelihood of voting for the male-congenial candidate than the female-congenial candidate was not significant among Republicans,  $p = .31$ . In addition, consistent with the tri-

ple Participant Sex  $\times$  Candidate Attitudes  $\times$  Participant Party interaction (see prior paragraph), this double interaction was significant among male participants,  $p = .001$ , but not among female participants,  $p = .39$ , who consistently preferred the candidate who expressed female-congenial attitudes.

*OTHER MEASURES, BASED ON CANDIDATE'S SEX, POLITICAL PARTY, AND ATTITUDES*

*Attitudinal similarity.* Participants perceived attitudinal similarity on the basis of the attitudes and the party of the candidate, in conjunction with their own political affiliation. As in Experiment 1, the gender-congeniality effect emerged in the Participant Sex  $\times$  Candidate Attitudes interaction,  $F(1, 152) = 5.62$ ,  $p = .02$  (see Table 4). Thus, male participants, more than female participants, perceived the male-congenial candidate as similar,  $p = .02$ , although female and male participants did not differ in their perception of the female-congenial candidate,  $p = .27$ . In addition, the marginal three-way Participant Sex  $\times$  Candidate Attitudes  $\times$  Participant Party interaction,  $F(2, 152) = 2.88$ ,  $p = .06$ , resembled the voting results, with this gender-congeniality effect absent among Democratic participants. In addition, showing the effects of participants' own political affiliations was the Participant Party  $\times$  Candidate Attitudes interaction,  $F(2, 152) = 11.80$ ,  $p < .001$ , which patterned similarly to the voting results. Unique to Experiment 2 was the Participant Party  $\times$  Candidate Party interaction,  $F(2, 152) = 4.18$ ,  $p = .02$ , which reflected a party-matching effect whereby Democratic participants perceived the Democratic candidate as more similar than the Republican candidate,  $p = .03$ , and Republican participants perceived the Republican candidate as nonsignificantly more similar than the Democratic candidate,  $p = .15$ .

*Likability.* The gender-congeniality effect emerged in the Participant Sex  $\times$  Candidate Attitudes interaction,  $F(1, 151) = 22.88$ ,  $p = .005$  (see Table 4). Thus, male participants, more than female participants, perceived the male-congenial candidate as likable,  $p = .03$ , and female participants, marginally more than male participants, perceived the female-congenial candidate as likable,  $p = .07$ . Also significant was the party-matching Participant Party  $\times$  Candidate Party interaction,  $F(2, 151) = 14.01$ ,  $p = .008$ , whereby Democratic participants regarded the Democratic candidate as more likable than the Republican candidate,  $p = .04$ , and Republican participants regarded the Republican candidate as marginally more likable than the Democratic candidate,  $p = .03$ .

*Political effectiveness.* The gender-congeniality effect extended to perceptions of political effectiveness. The Participant Sex  $\times$  Candidate Attitudes interaction,  $F(1, 152) = 8.00$ ,  $p = .005$  (see Table 4), reflected a tendency for men, more than women, to perceive the male-

**TABLE 4: Other Measures: Experiment 2**

Sex of Participants	Candidate Attitudes			
	Male-Congenial		Female-Congenial	
	M	SD	M	SD
Attitudinal similarity				
Male	3.41	1.78	3.37	1.62
Female	2.87	1.50	3.79	1.30
Overall	3.12	1.65	3.57	1.49
Political effectiveness				
Male	4.26	1.02	4.24	0.91
Female	3.85	1.13	4.51	0.90
Overall	4.04	1.09	4.37	0.91
Likability				
Male	4.16	1.52	3.90	1.68
Female	3.43	1.78	4.83	1.51
Overall	3.77	1.69	4.35	1.66
Benefits to self				
Male	3.56	1.66	3.29	1.59
Female	3.04	1.41	4.43	1.39
Overall	3.28	1.55	3.83	1.60

NOTE: Means are on a scale ranging from 1 to 7 on which higher numbers indicate greater likelihood of each quality. Cell *ns* ranged from 47 to 55.

congenial candidate as effective,  $p = .008$ , and a marginal tendency for women, more than men, to perceive the female-congenial candidate as effective,  $p = .09$ .

*Perceived self-benefits.* Perceptions of the personal benefits that would follow from the candidate's attitudinal positions produced the gender-congeniality Participant Sex  $\times$  Candidate Attitudes interaction,  $F(1, 152) = 13.66$ ,  $p = .001$  (see Table 4), which also was obtained in Experiment 1. Thus, male participants, marginally more than female participants, perceived male-congenial attitudes as self-beneficial,  $p = .06$ , whereas female participants, more than male participants, perceived female-congenial attitudes as self-beneficial,  $p = .001$ . Also replicating Experiment 1, participants' party affected perceived self-benefits in the form of the Participant Party  $\times$  Candidate Attitudes interaction,  $F(2, 152) = 4.87$ ,  $p = .009$ , which paralleled the voting results.

*Agentic and communal personality.* Replicating Experiment 1, candidates were perceived as more agentic but less communal when their attitudes were male-congenial compared with female-congenial,  $F(1, 152) = 19.78$ ,  $p < .001$  for agency and  $F(1, 152) = 86.26$ ,  $p < .001$  for communion. Also, as in Experiment 1, male participants perceived the candidates as more communal than did female participants,  $F(1, 152) = 4.98$ ,  $p = .03$ . Unique to Experiment 2, female candidates were perceived as more agentic than male candidates,  $F(1, 152) = 8.23$ ,  $p = .005$ , perhaps reflecting a shifting-standards effect (Biernat & Kobrynowicz, 1999).<sup>7</sup> Also, consistent with the gender-congeniality effect on voting, the Participant Sex  $\times$  Candidate Attitudes interaction,  $F(1, 152) = 5.24$ ,

$p = .02$ , reflected the ascription of more communion to the candidate who endorsed attitudes congenial to the participant's sex, although the simple effects of participant sex within levels of candidate attitudes were not significant,  $ps > .20$ .

#### MEDIATIONAL ANALYSES

To examine some of the processes that may underlie the gender-congeniality effect on voting, we used path analysis to test simple mediational models (Kenny, Kashy, & Bolger, 1998) that treated several evaluative reactions as potential mediators of the relation between the gender-congeniality manipulation and voting—specifically, the candidate's attitudinal similarity, likability, and political effectiveness and the perceived self-benefits of the candidate's attitudes. In these analyses, the gender-congenial experimental conditions (i.e., men reacting to the male-congenial candidate and women to the female-congenial candidate) were represented by a value of 1, and the gender-uncongenial conditions (i.e., women reacting to the male-congenial candidate and men to the female-congenial candidate) by a value of 0. These analyses proved to be very similar when the data for the two experiments were analyzed separately. Therefore, for brevity and increased power, we present these findings with the data aggregated across Experiments 1 and 2, except for the likability measure, which appeared only in Experiment 2.

The requirements for showing mediation were successfully met for each of the potential mediators (Kenny et al., 1998): (a) Gender congeniality was significantly related to the voting outcome variable and each of the potential mediators and (b) each of the potential mediators was significantly related to voting when the effect of gender congeniality on voting was controlled. Moreover, as an index of the success of the mediational models, we present the *Z* statistic yielded by the Sobel test, which assessed the significance of the reduction in the strength of the relation between gender congeniality and voting from taking the indirect, mediational path into account (see Kenny et al., 1998, p. 260). These *Z* statistics were the following: 4.74,  $p < .001$ , for attitudinal similarity; 3.22,  $p = .001$ , for liking (Experiment 2 only); 4.05,  $p < .001$ , for political effectiveness; and 4.73,  $p < .001$ , for self-benefits. These results were consistent with the assumption that each of these four variables partially mediated the overall relation between gender congeniality and voting and that the mediation was a broadly evaluative reaction to the candidate. The direct relation between gender congeniality and voting was reduced to nonsignificance for the liking mediator as well as for a model treating all four mediators as a composite variable. Additional analyses that separated the data by participant political party showed that each of the above

mediational models was most successful for Republicans, successful also for independents, but unsuccessful for Democrats, who voted for the more liberal, female-congenial candidate regardless of their own gender. For these participants, the tendency to vote for the female-congenial candidate more than the male-congenial candidate was successfully mediated by these evaluative measures.

#### GENERAL DISCUSSION

Our experiments, which we designed to provide experimental tests of the extent to which the typical gender gap in voting can be ascribed to sex differences in voters' attitudes, produced strong results. These findings help resolve the ambiguities inherent in the support that this hypothesis has received in correlational analyses of voting in actual elections (e.g., Manza & Brooks, 1998; Seltzer et al., 1997). Experiment 1 examined the impact of the gender-congeniality of candidates' attitudes on voting when participants received information only about the candidate's sex and attitudinal positions, and Experiment 2 examined this impact when participants in addition received information about the candidate's political party. In these two experiments as well as the preliminary experiment, participants favored candidates associated with gender-congenial attitudes. Our expectation that a tendency to vote for candidates of one's own party would be evident in Experiment 2, along with this gender-congeniality effect, was not confirmed. Impressively, this party-matching effect, which was strong in absence of attitudinal information, was outweighed by the impact of candidates' attitudes. Thus, this new study, similar to Experiment 1, produced a gender-congeniality effect on voting, whereby women, more than men, voted for the candidate who expressed female-congenial attitudes, and men, more than women, voted for the candidate who expressed male-congenial attitudes. Also replicating Experiment 1, this experiment found that this overall gender-congeniality effect was absent among Democratic participants.

Our interpretation of the moderating effect of participants' political party, as stated in our discussion of Experiment 1, is that at least insofar as voting is concerned, women adhere to the interests of the female gender more strongly than men adhere to the interests of the male gender. As we noted in the Introduction of this article, our other research also has shown that women endorse policies perceived to support the interests of their gender, whereas men do not show similar loyalty to their gender (Diekmann et al., 2002). The data from the present experiments show that group interest, self interest, and voting worked together in our female participants so that they consistently favored candidates with female-congenial issue stances. In contrast, men did not

consistently favor candidates with male-congenial issue stances. Instead, Democratic men favored candidates associated with female-congenial policies and found their attitudes to be relatively similar to their own attitudes. Thus, the anticipated sex differences in voting, that is, voting gender gaps, emerged among Republicans and independents but not among Democrats.

We suggest that the distal causes of women's tendency to vote according to their gender rather than their political party lie in their more subordinate social position, coupled with rapid changes in women's status, which have been associated with women's increasing political sophistication and the activism of the women's movement (Eagly & Diekmann, 2002). There is no comparable social movement organized to promote men's interests, and therefore, men are unlikely to be as alert as women are to voting for candidates who favor their own interests. Despite our provocative voting findings, Republican women remain ideologically conservative on issues that do not impinge so clearly on their gender's interests as the issues we presented in these experiments. Thus, in both experiments, political party of participants showed the expected significant effect on self-reported liberal-conservative ideology, with Republicans, including Republican women, more ideologically conservative than the other groups.

In general, these experiments showed that gender gaps in voting can derive from candidates' attitudinal positions and the divergent attitudes of men and women. These experimental tests of the attitudinal theory of the gender gap complement correlational tests that related respondents' attitudes on a variety of issues to their reported candidate preferences (e.g., Seltzer et al., 1997). Although our research has not investigated the important question of how these effects might be influenced by different specific policy areas in which attitudes can be congenial to men or women (see Schlesinger & Heldman, 2001), our findings were intact with two different sets of male-congenial and female-congenial attitudes that participants perceived were generally relevant to voting. Therefore, candidates who usually convey support for policies favored more by one sex are vulnerable to producing a gender gap if voters accurately perceive these attitudes.

To represent the psychological processes that mediated the relation between candidates' attitudes and participants' voting, several variables emerged not only as theoretically plausible but also as statistically viable. Thus, the data were generally consistent with the view that candidates' gender-congenial attitudes caused our participants to recognize the similarity between their attitudes and the candidate's attitudes, to like the candidate, and to regard him or her as politically effective and as expressing political positions that were beneficial to

their gender and to them personally. These findings suggest that, consistent with Byrne's (1997) attitudinal similarity model, gender congeniality induced a generally positive attitude toward the candidate, which was then expressed in voting. The exception emerged among the Democratic participants, who voted according to political party, with Democratic men as well as women evaluating the female-congenial candidate favorably. Evaluative mediation of voting appeared plausible with these Democrats as well but in relation to an attitudinal independent variable construed as female-congenial (vs. male-congenial) for both sexes.

Gender-congeniality effects could arise from sex differences in participants' overall liberal versus conservative ideology if the attitudinal sex differences we examined merely reflected overall ideological differences. Although a somewhat more liberal ideology was reported by female participants than male participants in Experiment 1,  $p = .006$ , no such difference emerged with Experiment 2's student participants. Also, a tendency in Experiment 1 for more women than men to identify their political party orientation as Democratic and fewer women to identify it as Republican, independent, or other,  $p = .05$ , was not obtained in Experiment 2. Moreover, the attitudinal effects on voting in Experiment 1 remained significant in regression analyses that controlled for participants' liberal-conservative ideology and its interaction with the candidate's perceived liberal-conservative ideology. Thus, consistent with the very small self-reported sex differences in liberal-conservative ideology in nationally representative surveys (Eagly & Diekmann, 2002), voting gender gaps primarily reflect attitudinal sex differences in specific domains rather than broad ideological differences in liberal-conservative ideology.

Although our experiments show that voting gender gaps can follow from policy voting and attitudinal sex differences, this research, similar to most experiments, presented a simplified reality. Attitudinal positions (and political party in Experiment 2) provided the only information that participants had about the candidates beyond their sex. In contrast, voters in real elections often possess information about candidates' personalities, current and past behaviors, and personal appearance. It is possible that men and women differently weigh these other features of candidates. In particular, the idea that women are more attentive than men to candidates' personality characteristics and men to their policy positions (e.g., Harrison, Stephen, Husson, & Fehr, 1991) is of interest but would require experiments presenting information about such characteristics as well as their policy positions and political party.

Another important consideration in interpretation of our research is that voters would engage in the processes

modeled by these experiments only to the extent that they perceived candidates' attitudes and used this information to guide their voting. Consistent with experiments on voting that did not present candidates' issue positions or party (e.g., Huddy & Terkildsen, 1993), voters may use sex as a rough guide to inferring gender-stereotypic attitudes and personality traits when they lack other information. In contrast, in our studies, because attitudes were made salient, there was no evidence that the candidate's attitudes or personality were perceived gender-stereotypically. Nonetheless, such effects might occur in actual campaigns to the extent that politicians' attitudes are unclear, unexpressed, or not perceived by voters. In addition, as suggested by the higher name recall and recognition for female than male candidates (Darcy, Welch, & Clark, 1994), media attention to female candidates might make their gender particularly salient in elections.

Another concern about generalizing from these findings to political decision making in natural settings is that our participants might have become aware of the potential impact of the candidate's sex on their judgments and have attempted to correct their reactions for this bias. Research suggests that people may correct their judgments for the effects of biasing factors when they are motivated and able to do so and that these corrections follow from naive theories of how contextual factors affect judgments of target persons (Wegener & Petty, 1995). Given the rarity of women as Congressional Representatives, a female candidate might elicit a theory of prejudice toward women in such roles, and such a naive theory might induce a correction toward more favorable reactions to female candidates. Yet, to the extent that such a correction ensues, it might occur as well in natural settings in reactions to actual candidates. Possibly suggesting similarity in any such corrections, analyses of elections in the United States have shown that, in general, male and female candidates fared equally well (Seltzer et al., 1997), just as they did in our experiments.

The question of whether gender gaps in actual elections have been moderated by voters' political party is beyond the scope of this research project. Such moderation would not necessarily occur in the manner observed in this research because candidates would not ordinarily convey issue stances that are as consistently male-congenial or female-congenial as those that we used in these experiments. Instead, candidates would be aware of voting gender gaps and no doubt strive to present at least some policy positions and symbols attractive to voters of each sex. For example, George W. Bush's campaign adopted the slogan of "compassionate conservatism," presumably to soften the male-congeniality of their favored policies and thus attract female voters. Our experiments suggest that this aspect of Bush's strategy

was wise because at least some male-congenial, conservative policies are likely to alienate many Republican women.

The attitudinal sex differences that underlie voting gender gaps may reflect various aspects of the positioning of women and men in differing social roles, including women's greater family responsibilities and their less advantaged status in the paid labor force (e.g., Eagly & Diekmann, 2002; Orum, Cohen, Grasmuck, & Orum, 1974; Sapiro, 1983). Just as the contrasting position of the sexes in the social structure shapes their social behavior (e.g., Eagly, Wood, & Diekmann, 2000), it can shape their attitudes and values. In particular, given the current positioning of the sexes in the social structure, many women are interested in changing social policies in a direction that would favor gender equality and support the interests of women and families. Participating minimally in the rightward shift that occurred in men's attitudes and voting in the 1970s and 1980s (Seltzer et al., 1997; Trevor, 1999), women in most advanced industrialized societies are more supportive than men of social policies that act to protect their interests and the interests of other subordinated groups (Inglehart & Norris, 2000). At the level of broad value orientations, these attitudinal sex differences tend to be associated with men's greater approval of group hierarchy and dominance (Pratto et al., 1997; Sidanius & Pratto, 1999) as well as women's greater support for equality and for helping those who are in need (Schlesinger & Heldman, 2001). Although this set of experiments has not addressed the causes of attitudinal sex differences, its demonstration of some of the consequences that these differences can have for voting invites attention to the causal question.

#### NOTES

1. Half of the male-congenial and the female-congenial items were the same as those used in the preliminary experiment.

2. For brevity, we omit description of the main effects of candidates' attitudes on voting and on attitudinal similarity, political effectiveness, and perceived self-benefits,  $f_s = .05$  or smaller, by which candidates with female-congenial attitudes were rated more favorably than those with male-congenial or mixed attitudes,  $f_s = .05$  or smaller. These main effects were subsumed by the theoretically relevant, higher-order interactions that we report.

3. For voting and other dependent variables, male and female participants did not react differently to the candidate with mixed attitudes. Therefore, these contrasts are not noted in the text.

4. The events of 9/11 eliminated the possibility of canvassing in airport departure lounges. Given the similarity of the data from the student sample of the preliminary experiment and the airport sample of Experiment 1, we then sampled participants from student populations for Experiment 2, albeit from two universities.

5. Results showed similar patterns when the participants who failed the manipulation check were included.

6. For brevity, we again omit description of the main effects of candidates' attitudes on voting and political effectiveness,  $f_s = .05$  or smaller, and the marginal main effects on likability and perceived self-benefits,  $p = .08$  or smaller, by which candidates with female-congenial attitudes were rated more favorably than those with male-congenial attitudes.

7. An unpredicted Candidate Attitudes  $\times$  Candidate Party  $\times$  Participant Sex  $\times$  Participant Party interaction also was found,  $F(1, 152) = 6.33, p < .025$ . When male participants read about a Republican candidate, the effect of candidate attitudes on agency was diminished.

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