

DOCUMENT RESUME

ED 222 440

SO 014 353

AUTHOR Welch, Susan; And Others  
 TITLE The Effect of Candidate Gender on Electoral Outcomes: A Six-State Analysis.  
 PUB DATE Sep 82  
 NOTE 31p.; An earlier version of this paper was presented at the Annual Meeting of the American Political Science Association (Denver, CO, September 2-5, 1982).  
 EDRS PRICE MF01/PC02 Plus Postage.  
 DESCRIPTORS \*Elections; \*Females; \*Legislators; Longitudinal Studies; Males; Social Science Research; \*State Government; \*Success; Voting  
 IDENTIFIERS \*Voting Behavior

ABSTRACT

Voter behavior is assessed toward female candidates for state legislatures in six states during 1970 to 1980. The sample consisted of 4,910 female and male candidates in state legislative elections to the lower house in Iowa, Missouri, Nebraska, New Mexico, Oklahoma, and Wyoming. The relationship of party, incumbency, and urban or rural residency to female success was measured. Results indicated that women candidates increased over the decade, but still represent only 14.8 percent of the total. Generally, women do as well as men in primary elections but not as well in general elections, although by 1980 the differences were no longer significant when corrected for incumbency and party. Also, Republican women fared better than Democratic or nonpartisan women in comparison to the male colleagues. The conclusion is that since women fare about as well as men at the polls, the lack of female legislators can be attributed mostly to the paucity of candidates. The findings do not support the argument that political party elites work against females once they have become candidates. (KC)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

X This document has been reproduced as  
received from the person or organization  
originating it.  
Minor changes have been made to improve  
reproduction quality.

- Points of view or opinions stated in this docu-  
ment do not necessarily represent official NIE  
position or policy.

ED222440

The Effect of Candidate Gender on Electoral Outcomes:  
A Six State Analysis\*

"PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

Susan Welch

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)."

Susan Welch

Margery M. Ambrosius  
University of Nebraska

Janet Clark  
University of Wyoming

Robert Darcy  
Oklahoma State University

sq 014 553

\*An earlier version of this paper was presented at the 1982 Meeting of the  
American Political Science Association, Denver, Colorado, September 2-5.  
The authors wish to thank Timothy Bledsoe, Sarah Brandes, Robert Dewhirst,  
Cynthia Thornton, and C.J. Robinson for their assistance in data  
collection. Alan Both made several useful suggestions on the manuscript.

## THE EFFECT OF CANDIDATE GENDER ON ELECTORAL OUTCOMES:

### A SIX STATE ANALYSIS

What is the reaction of voters to women candidates for public office? Do women suffer a penalty at the polls because of their gender? If voters do not penalize women, then explanations for the absence of women in public office must lie elsewhere -- in women's own aspirations and in perceptions of party leaders and other political elites who may believe that women are at a disadvantage. Leaders may not encourage potential women candidates to run and may refuse to give time, money and support to women's campaigns. On the other hand, if voters do penalize women then that in itself is a significant reason for their underrepresentation. If accurately perceived, this penalty would also influence the behavior of political leaders, campaign donors and potential female candidates themselves.

This study, the most comprehensive examination of voter behavior toward female candidates yet conducted, is based on an examination of nearly 6,000 electoral contests for state legislature in six states during 1970 to 1980. The purpose is to assess the effect, if any, of candidate gender on vote totals and probabilities of victory.

#### PRIOR LITERATURE

Several techniques have been used to assess voter reaction to female candidates. A brief examination of the findings and limitations of these studies will set the stage for our examination of female electoral success.

## Election Studies

A few previous studies examining actual voter behavior toward female candidates have produced contradictory results. Karnig and Walter's (1976) survey of candidate success in 774 U.S. cities found that females ran for about 20 percent of the seats and won about 10 percent, or half those they contested. Darcy and Schramm (1977) reported similar outcomes in the 1970-74 Congressional elections. Few significant differences in the success of male and female candidates emerged once party and incumbency were controlled. In a similar vein, Brewer, et al., (1981) discovered few differences in votes polled by male and female candidates for the Oklahoma House, again controlling for incumbency and party.

On the other hand, Clark's (1981) study of female candidates in New Mexico found women winning more than 50% of the time against male opponents only in County Commission races, while winning only 24% of the contests for state representative, 46% for State Senator, and from 18% to 46% for other state and local offices. She did not, however control for party and incumbency in the analysis. And, Ambrosius and Welch (1981) in an examination of state legislative races in Nebraska, Iowa and Missouri for 1950 to 1978 found that the net electoral disadvantage for female candidates was substantial and dropped only slightly from 13 percent in the pre-1970 races to 11 percent in the 1976-1980 contests. These percents were calculated after controlling for incumbency and party effects.

In a study of five decades of female Pennsylvania Congressional candidates, Deber (1982) discovered that while overall women congressional candidates were not disadvantaged by voters, women nominated in competitive

districts were. The long time span examined makes it uncertain if the reported pattern still exists, since almost 90 percent of female candidacies were before 1964, and Pennsylvania has not elected a woman to congress since 1962 (Williams, 1981:17). Then too, in comparing voting percentages for female candidates with those of male candidates of the same party and district two years previously, Deber ignored the incumbency of the candidates, a factor crucial to election outcomes.

### Survey Research

Analyses based on survey data also yield mixed findings. Hedlund, et al. (1979), in a survey analysis, reported that voters were not predisposed either for or against female candidates in general, but voter predispositions varied depending on the nature of the office for which the woman was running and the characteristics of the life cycle of the female candidate herself. Several studies (Ferree, 1974; Erskine, 1971; Welch and Sigelman, 1982; Spitze and Huber, 1980; and Schreiber, 1978) show that most people in national samples say they would be willing to vote for a woman for president, but even as late as 1978, about 18 percent say they would not. This core of built-in opposition is substantial, although presumably fewer respondents would be opposed to women running for lower offices (cf. Adams, 1975; Hedlund, et al., 1979).

### Simulations

By isolating the single factor of gender, simulations have yielded further information about gender preference among potential voters. Ekstrand and Eckert (1981) found that among college students no overall gender effect on voting was present; Gitelson and Gitelson (1980-81) found similar results among high school students. However, in the former study, female voters showed a preference for a female candidate with liberal credentials, but showed no such preference for a conservative female candidate. Sigelman and Sigelman (1982) find even more striking subgroup differences. Again they find no overall effect of candidate gender on simulated voting among college undergraduates, but do find strong preferences for female candidates among females, male candidates among males. In yet another simulation, Adams (1975), also finding no overall effect of candidate gender on vote, discovered that women received more votes for local rather than national, and legislative rather than executive offices.

### Candidate Surveys

Another approach to eliciting voter preferences regarding female candidates has been to survey female candidates and officeholders. Mezey (1978) surveyed a sample of officeholders in Hawaii. These surveys generally report both the advantages (trustworthiness, honesty, conscientiousness) and the disadvantages (hostility toward women, raising money) of being a female candidate (Kirkpatrick, 1974; Diamond, 1977;

Carroll, 1977; Mezey, 1978; Clark, 1981). Only Mezey (1978) surveyed both male and female candidates and she studied only winners. Unfortunately she did not ask questions permitting comparisons of voter reactions and party support, fund raising and other, similar, matters. There have been no candidate surveys comparing the campaigns of male and female winning and losing candidates although recruitment patterns of male and female candidates have been studied (Miller and Noyes, 1980; Dubeck, 1976; Van Hightower, 1977; Miller, 1981; Merritt, 1977; Merritt, 1980; Mezey, 1980). These studies, however, have not examined the relative electoral success of similar men and women candidates nor have they related recruitment patterns to success in differing electoral circumstances (presence of an incumbent, type of office, party, primaries) .

#### Limitations of Previous Studies

Thus, findings from prior research on the electoral effect of candidate gender are mixed. Aggregate vote analyses yield contradictory findings, perhaps due to the single state locale (Clark, et. al. 1981; Brewer, et. al., 1981), limited time period examined (Darcy and Schramm, 1977; Karnig and Walter, 1976), omission of consideration of primary elections (Ambrosius and Welch, 1981), and lack of incumbency and party controls (Karnig and Walter, 1976). Survey research on this question also has limitations because of the hypothetical nature of the questions, responses from non-voters, limited voter awareness, and focus on bias against female candidates without examining bias in favor of female candidates (Hedlund, 1979; Gallup Opinion Index 178, June 1980:5). Simulations, while useful,

have drawbacks as well in their use of high school and college students as subjects. Students are not necessarily very representative of the larger voting population. Candidate surveys deal only indirectly with voter reactions.

Thus, while it is clear that few women have been elected to our representative bodies, it is not clear why this is so. Previous studies have provided suggestive findings, but have not isolated the mechanisms affecting female representation. Any complete analysis of the effect of voter reaction to women candidates must ideally be based on more than one election to avoid the contextual effects of that election, should consider more than one state or locale to take into account cultural biases specific to that one location, and should be based on a large number of cases to allow controls for several factors relevant to voter choice.

#### Impacts on Voter Choice

Probably the most important factor to control in examining female success is incumbency. Incumbents in all offices have some advantages, including name recognition and ability to gain financial support that lead to enhanced vote totals. In 29 state legislatures from 1906 to 1976, incumbents won about 90 percent of all races they entered (Calvert, 1979).<sup>1</sup> Since compared to male candidates, a smaller proportion of female candidates are incumbents, any comparison between male and female candidates must take this factor into account.

Party is another relevant factor. If women are candidates only in districts where their party is not competitive, then their lower vote totals

in the general election would be a reflection less of voter discrimination than party leader discrimination. The parties may differ in their willingness to slate female candidates. Van Hightower (1972; see also Merritt, 1977; Dubeck, 1976) in her study of candidates for state and local office in the New York area in 1972, concluded that the Democratic party, being a party of greater factionalization, was more likely to allow relative outsiders, including women, to compete for races where they might perceive a chance of winning. Republicans were more likely to allow outsiders to run only as sacrificial lambs in races where no possibility of success existed. Darcy and Schramm (1977) found that both Republican and Democratic women candidates are more likely to be nominated in liberal urban districts to the advantage of Democratic women candidates and the disadvantage of Republican women. Rule's (1981) conclusions are somewhat contradictory, finding a negative correlation between Democratic party dominance and the recruitment of women as state legislative candidates.

The rural or urban setting would seem to be another factor of importance in considering female candidate success. Although not a factor affecting voter choice, it is reasonable to suppose that the urban nature of the district may affect the propensity of females to run and their success once candidates. However, the literature dealing with the impact of level of urbanness on female candidate recruitment and success is fragmentary and suggestive rather than definitive.

Kirkpatrick (1974: 31) observed that most of the fifty female state senators and representatives whom she studied grew up in small towns or rural areas. Werner (1968), in a study of the 1963-64 session of state legislatures, concluded that women had more often won election in states of

lower urbanization than in the rest of the country. Diamond found that normally sex differences in candidacies are less pronounced in urban settings. However, in the New England states which she studied the expected urbanness effect appeared to be overridden by factors of level of competition and strength of the Republican party. The rural Republican districts were traditionally extremely low in competition, allowing women candidates relatively easy access to nomination and election. Over time, however, Diamond found increasing numbers of urban Democratic female candidates. King (1977), in her study of Iowa state legislators, also reported increasing numbers of women candidates coming from urban areas.

In their voter simulation, Ekstrand and Eckert (1981) found differences between rural, urban, and small town voters. Urban voters exhibited no preference for one sex over another, while rural voters preferred a conservative female to a conservative male but chose a liberal male over a liberal female. Voters from small towns preferred the conservative male over the conservative female but exhibited no sex-based preference among liberal candidates. Thus only in the urban areas were voters neutral in terms of the sex of candidates.

Other studies have dealt with the effect of urbanization on the recruitment and nomination as well as success rates for women. Darcy and Schramm (1977), examining congressional races nationwide in 1970-74, found that women, particularly Democratic ones, were nominated from districts which were more urban than were districts nominating only men. Rule (1981), on the other hand, found recruitment to be unrelated to rural urban differences. Her study of state legislators in 1974 thus conflicted with earlier studies. Karnig and Walter (1976), in their 1975 study, found a

small correlation (.15) between women's candidacy rates for city council positions and logged city size. Welch and Karnig (1979) reported that their 1978 data showed larger communities to be more likely to elect female mayors as well as female council members, providing further support for the importance of urbanness for female electability.

Thus, these studies appear to indicate a changing pattern over time. If the studies are at all comparable, women candidates have done increasingly better in urban areas over the past twenty years.

#### DATA AND METHODS

Our study is based on an analysis of 4910 candidates in state legislative elections to the lower house in Iowa, Missouri, Nebraska, New Mexico, Oklahoma, and Wyoming from 1970 to 1980.<sup>2</sup> The unit of analysis is the candidate. In Nebraska, New Mexico, Oklahoma and Wyoming, information collected on each candidate running in the primary election included the gender of the candidate and opponents, incumbency status of candidate and opponents, party identification, and vote in the primary and general election. Information about the SMSA and population characteristics of the district were also coded. In Missouri and Iowa, the same information was collected on each primary candidate of both parties in districts where there was at least one female candidate. A sample of races with no female candidates in either party primary was then drawn, and data collected on each candidate in those all male races. Thus, we are dealing with the universe of female candidates and their opponents in all states, a universe

of candidates in all male races in Nebraska, New Mexico, Oklahoma and Wyoming, but a sample of all male races in Iowa and Missouri.<sup>3</sup>

Our statistical tools will include simple difference of means analyses which we will use to present descriptive information about the presence and success of women candidates. Then we will use multiple classification analysis to determine the net effect of gender after taking into account our control variables.

The data base and analysis procedures allow us to examine trends in female candidate success over a decade, compare that success among six different states, examine the interaction of party, incumbency, and female success, and compare female success in rural and urban areas. The study's limitations include its focus on only one office. Geographical focus is also somewhat limited, although it encompasses two "sun belt" states (Oklahoma and New Mexico), part of what might be termed the industrial Midwest (the St. Louis area of Missouri) as well as the less industrial Midwest and Plains states (Nebraska, Iowa and Wyoming). The examination of rural and urban areas should further our ability to draw some inferences about female success in a somewhat broader group of states.

#### FINDINGS

Table 1 compares the incidence and success of men and women state legislative candidates in these states. Several findings are clearcut. Women are a small proportion of candidates; in these races, only 10 percent are women. However, if we examine the number of candidacies before and after 1975 (not shown), progress has occurred. Between 1970 and 1975, only

7.9% of the candidates were women while since then 12.1%, and in 1980, 14.8% were women. While this is a substantial increase, obviously 14.8 percent falls far short of population equity.<sup>4</sup>

Women suffer no disadvantage in primary elections, winning fully as many votes as men. On the other hand, the net electoral disadvantage to women in general elections is substantial. While men garner nearly 61 percent of the vote in races they contest, women gain only 50 percent. These general election-primary election vote differences are reflected in the percents of races won by men and women in these two elections; women and men win about the same proportion of their primary races, but men win substantially more of their general elections.

This finding is at first blush surprising. If there were discrimination against women at the polls, one might expect to find it to be more evident in primaries, where party cues are not operative, than in general elections, where they are. One possible explanation is that women are more often "sacrificial lambs," running as Democratic candidates in Republican strongholds, for example. In such a situation, the candidate could poll 100% in the Democratic party primary, but only a small percent of the vote in the general election. If women were more often found in these situations than men, then this would help explain the findings in Table 1. However, only 7.2% of the women and 4.0% of the men are unopposed in the primary but win 35% or less of the general election vote, a difference that seems fairly negligible.

The distinctiveness of women candidates may be another possible explanation for their greater success in primary than general elections. The very fact that there are no party cues in a primary may lead some voters

to look for a candidate with a unique feature apparent on the ballot. Name and gender are such features. Thus, a woman may stand out among a group of anonymous male candidates. While such an advantage may also obtain in general elections, it would probably be less as party cues and greater voter awareness would reduce this random choice factor. Unfortunately, the nature of our data did not allow us to test this possible explanation directly.

However, the fact that various groups of female candidates fare quite differently in general elections relative to their male counterparts would seem to argue against this as a general explanation (see discussion below).

In order to isolate reasons for female candidate success, we next turn to a comparison of the votes won by women candidates in various states, of different urban districts, and at two different times. Women appear to do best in Wyoming, where they are significantly more likely to win their primaries than are men, although somewhat less likely to win their general election races. In Iowa, male female differences in votes polled are negligible in both primary and general elections, while in Oklahoma and Missouri women do slightly better than men in primary elections but significantly less well in the general elections. In Nebraska and New Mexico, women fare less well than men in both stages.

While one cannot make too much of an analysis of only six states, these findings suggest avenues for further research. Wyoming's multimember district system may positively affect female chances (Rule, 1981). Studies of female legislative representation at both the local (Welch and Karnig, 1979) and the cross national level (Lakeman, 1976) have found some positive impact of multimember districts on female representation. Nebraska's nonpartisan system may impede women's changes given the premium placed in

nonpartisan elections on name recognition, financial resources and community ties. Rule (1981) has suggested a positive relationship between female success and income in the state (see also Welch and Karnig for similar findings at the city level). Among our states, New Mexico is clearly the poorest, ranking 42 of the 50 states in per capita income (Laramie, 1982). Wyoming is the wealthiest, ranking 5, with the other states clustered around the midpoint (Nebraska 24, Oklahoma 25, Iowa 26, and Missouri 31). At the extremes these rankings comport with our findings of levels of female representation, although given the small N we cannot make too much of this correspondence.

Table 2 also indicates that women did better relative to men in the post 1975 period general elections compared with the 1970-1975 years. Even during 1975-1980, however, the differences were significant. Women also did better in general elections relative to men in the most urban districts, those which are parts of cities of over 100,000. They did relatively poorly in each other size community. Again, however, differences in performance in primaries is negligible.

The differences between men and women in their general election vote may not be a result of voter discrimination, but rather, the factor of incumbency. If males are more often incumbents and females more often are challengers to incumbents, then it is not surprising that males win more votes than females. Table 3, part a, does indeed indicate that when incumbency is controlled, male-female differences in general election votes are greatly diminished. Women incumbents do substantially less well than men incumbents (76 to 70), but as non-incumbents facing incumbents both genders do about the same. And, as non-incumbents facing non-incumbents,

men do only slightly better than women. Thus the factor of incumbency does reduce substantially the male female differences found earlier. In primary elections, women do significantly better than men when only non-incumbents are involved, and about the same in other instances.

Party may be another factor that helps explain male-female candidate differences. Part b of Table 3 shows clearly that Republican women are the most equal in votes accrued; Democratic women do significantly less well than Democratic men in the general election, while women running in nonpartisan races, or in a few cases as independents, do substantially less well than men in both general and primary races.

However, to be sure about the effect of party we need to examine the fate of party members by similar incumbency status. Perhaps Democratic women more often face incumbents than do Republican women. That would affect their relative success. Part c of Table 3 examines the breakdown of electoral success by party and incumbency for general election votes. Republican women of each incumbency status poll votes equally with Republican men. Democratic women incumbents do less well than their Democratic male counterparts by a significant margin, and Democratic women non-incumbents facing other non-incumbents also do less well than their male colleagues, although the difference is not large. Democratic women facing incumbents are on a par with men. Amongst those running on nonpartisan or other tickets, women fare more poorly than men in every category, although only the differences in the non-incumbents facing incumbents category are statistically significant.

Since female success increased during the 1970's, we have examined these breakdowns for all general elections since 1975. Male-female differences

have decreased in most categories. Democratic female incumbents are still substantially disadvantaged, relative to male Democratic incumbents, but differences between male and female Democrats in other categories have disappeared.

Why do incumbent Democratic females do less well than their male counterparts? One explanation is the different distribution by state of male and female incumbents. Forty percent of the men but only 10 percent of the women incumbents are from Oklahoma, where the average incumbent wins 90 percent, while 53 percent of the female and only 26 percent of the male incumbents are from Missouri where the average incumbent polls 78 percent. Among the states, only in Oklahoma are Democratic female incumbents severely disadvantaged. Incumbent nonpartisan females also still suffer an electoral disadvantage. Nonpartisan elections place a premium on name recognition and ability to attract money and campaign workers independent of existing party organizations. It may be that women are not as well placed to do this, in part because of perceptions that "women can't win," perhaps in part because women are less likely to have ties with the business elite in most communities. Nonpartisan races also offer no party cue that might, in partisan races, work to override prejudicial feelings toward women candidates.

To calculate the net effect of gender on vote, we need to control for these factors of party, time, incumbency and urban population. Tables 4 and 5 present multiple classifications for primary and general election votes, before and after 1975. As we have seen, the overall difference between men and women candidates in primary votes is negligible in both the early part of the decade, and later. Neither do women suffer a disadvantage relative

to men in primary elections once incumbency, party ties and urban locale are controlled. As might be expected, incumbency has the strongest effect on primary vote, with party also having an effect. No significant interactions existed between gender and the other factors. In sum, the variables account for a substantial part of the variance in vote totals -- 68 percent in 1970-74, 59 percent in 1976-1980.

The results for the general election are different. In the 1970-74 elections, women candidates suffered a net deficit of 6.6 percent, controlling for the other variables. This is a statistically as well as substantively significant difference. By 1976-1980, this difference was reduced to only about 2 percent, a seemingly trivial difference.<sup>5</sup> As in the analysis of primary elections, the most significant explanatory variable was incumbency, followed by party. Urbanization had a small, although statistically significant, relationship. In the 1976-80 analysis the gender/urbanization interaction was statistically significant, with women faring somewhat better in more urban districts. As with the primary results, our variables explain a large amount of the variance, 55% and 57% in the two equations.

#### CONCLUSIONS

Our major conclusions are the following:

- 1) Women candidacies increased substantially over the course of the decade, but even by 1980 were only 14.8 percent of the total.

2) Women do as well as men in primary elections, even before controlling for incumbency and party. In some categories of party and incumbency, women have a slight edge in primary votes.

3) Women suffer a deficit compared with men in the general elections, but this deficit decreased during the decade to where during 1975-1980 it was no longer significant once incumbency and party were controlled.

4) Overall, Republican women fared better than either Democratic or nonpartisan women in comparison to their male colleagues. In the 1975-80 period, however, Democratic female candidates achieved parity with their male colleagues in every category but that of incumbents. Here, Democratic women still did less well than Democratic men. Nonpartisan women candidates continued to fare poorly relative to men.

These findings would seem to support the argument that, at least in partisan elections, if more women were candidates, proportionally more would be elected. While voter discrimination was significant throughout the early 1970's, by the latter part of the decade only an apparently insignificant modicum remained. Thus, since women fare about equally well as men at the hands of voters, at least for this office, the lack of female legislators can be attributed mostly to the paucity of candidates. Our findings do not support the argument that political party elites work against females once they have become candidates. The equality of male-female performance in primaries, the fact that women candidates do better in partisan races, and the small difference in the proportion of male and female candidates who are obvious "sacrificial lambs" indicate that once candidates, men and women are treated equally by party elites.

Why don't more women run? Part of the reason must be attributed to perceptions that women can't win, or suffer a disadvantage at the polls. This perception, while inaccurate now, certainly is an accurate reflection of the situation up until a few years ago. It may take several years for reality to influence perceptions, both on the part of potential female candidates themselves, and on the part of other political activists -- fundraisers, donors and party leaders and workers. It is possible that party elites discriminate against women at this stage rather than after candidacies become formalized.

Other factors, too, have limited women's political horizons. While an assessment of the influence of socialization, family situation, and occupation is beyond the scope of this paper, clearly more work examining the impact of these factors needs to be done. We also need to explore more thoroughly the nature of the constituencies where women candidates are most likely to be found. This should help us understand the contextual factors influencing female candidacies.

FOOTNOTES

1. A recent study of votes polled by Congressional incumbents finds House incumbents garnering around 66 percent in the 1976-1980 elections, with Senate incumbents gaining 55-56 percent. John Alford and John Hibbing, "Incumbency Advantage in State Elections," unpublished manuscript, 1982.
2. In Nebraska there is, of course, only one house.
3. The information sources included the Nebraska Blue Book, The Roster of State, District and County Officers (Missouri), Iowa Official Register (Red Book), Wyoming Official Directory and 1966-80 Election Returns, State of Oklahoma Election Results and Statistics, and the State of New Mexico Official Returns: 1966-1980 General and Primary Returns.
4. Nationwide, currently 12.3% of state legislators of both houses are women (Pierce, 1982).
5. When only incumbency was controlled, the female deficit was 2.8%, significant at  $s = .02$ .

TABLE 1  
Gender and Candidate Success

	Male	Female
% of Candidates	90%	10% <sup>a</sup>
% Primary Votes Won	69.9%	70.0% <sup>b</sup>
% Primaries Won	62.9%	66.7%*
% General Election Votes Won	60.6%	49.9%** <sup>b</sup>
% General Elections Won	60.7%	43.5%**

N = 3182 for general election analysis  
4910 for primary analysis

\*\* Significant at  $s \leq .001$

\* Significant at  $s \leq .05$

<sup>a</sup> excludes Iowa and Missouri where matched sampling was used

<sup>b</sup> excludes Wyoming because of its multimember districts

TABLE 2

Gender and Votes Polled by State, Time, and Urbanization<sup>a</sup>

	% Primary Election Votes		% General Election Votes	
	Male	Female	Male	Female
a) Iowa (776; 594)	70.7	67.7	49.9	47.4
Missouri (1246; 722)	57.5	60.4	58.3	53.4*
New Mexico (997; 722)	73.1	64.4*	59.7	43.5**
Nebraska (481; 278)	32.1	23.1*	54.6	43.7*
Oklahoma (1410; 866)	60.5	63.2	70.8	56.9*
Wyoming (897; 671)	73.7	82.9*	56.9	49.0
b) 1970-74 <sup>b</sup> (2404; 1548)	60.7	60.5	59.2	46.2**
1976-80 (2505; 1633)	61.0	61.2	61.9	52.7**
c) Rural <sup>b,c</sup> (1850, 1280)	62.1	67.0	61.7	48.7**
Small Town (1030, 730)	66.4	61.9	64.4	51.2*
Medium City (944, 671)	69.9	70.6	62.1	44.9**
Large City (1966, 1160)	54.9	54.0	56.8	51.9*

\* significant at  $\leq .05$

\*\* significant at  $\leq .001$   
(N primary; N general)

<sup>a</sup> For Wyoming, these percentages are percent of primaries and general elections won, rather than percent of vote won.

<sup>b</sup> Wyoming omitted

<sup>c</sup> Rural = largest town in district less than 10,000  
Small town = largest town 10,000-29,999  
Medium city = largest town 30,000-99,999  
Large city = largest town 100,000 and over

TABLE 3

Gender and Votes Polled by Party and Incumbency<sup>a</sup>

	% Primary Election Votes		% General Election Votes		% General Election Votes 1975-1980	
	Male	Female	Male	Female	Male	Female
a) Incumbents (1534; 1411) <sup>b</sup>	83.8	82.3	76.2	69.6*	78.1	71.7*
Non-Incumbents						
v. Incumbents (882;893)	28.9	30.6	37.4	35.3*	36.3	35.4
Non-Incumbents						
v. Non-Incumbents (2494; 878)	57.3	62.1*	55.7	50.1*	55.8	54.8
b) Republicans (1572; 1223)	77.1	75.9	50.8	47.1*	51.8	48.1
Democrats (2807; 1632)	58.1	56.2	69.9	56.5**	71.2	60.5*
Other (531; 327)	31.0	19.9*	48.3	30.9**	49.3	39.3
c) Republican Incumbents (414)			68.2	66.1	73.2	70.9
Democrats Incumbents (899)			80.7	73.9*	81.3	73.3*
Other Incumbents (98)			68.2	53.4	71.3	58.9
Republican Non-incumbents v. incumbents (479)			36.3	35.3	37.2	37.0
Democratic Non-incumbents (309)			40.6	39.2	37.5	37.0
Other Non-incumbents (105)			33.3	23.7*	31.3	29.3
Republican Non-incumbents v. Non-incumbents (330)			48.4	47.9	47.9	47.8
Democratic Non-incumbents (424)			65.0	55.3*	65.9	62.6
Other Non-incumbents (124)			43.1	32.0	44.0	43.6

<sup>a</sup> Does not include Wyoming

<sup>b</sup> (N primary; N general)

\* significant at  $s \leq .05$

\*\* significant at  $s \leq .001$

TABLE 4

Male-Female Differences in Primary Election Mean Percent Vote<sup>a</sup>  
(Multiple Classification Analysis)

	1970-74		1976-80	
Overall Difference between Males and Females : (Male-Female % Vote)	0.0 <sup>b</sup>	2.2 <sup>c</sup>	0.0 <sup>b</sup>	1.0 <sup>c</sup>
Main Effects	Eta	Beta	Eta	Beta
Sex	.00	.02	.00	.01
Urbanization	.14	.06*	.17	.08*
Party	.41	.23*	.37	.23*
Incumbency	.72	.66*	.71	.65*
Multiple R <sup>2</sup>	.58		.56	
Two-Way Interactions with Gender	F		F	
Sex-Urbanization	.79		1.41	
Sex-Party	.45		.27	
Sex Incumbency	.07		1.44	
Multiple R <sup>2</sup> Increment (All interactions)	.10		.03	
Total Multiple R <sup>2</sup>	.68		.59	
N	2394		2495	

<sup>a</sup> Wyoming is omitted due to its multimember districts

<sup>b</sup> Simple difference

<sup>c</sup> Difference adjusted for the other variables. Difference adjusted only for incumbency is 2.0 in 1970-74, and 1.0 in 1976-80.

\* Significant at .05

TABLE 5

Male-Female Differences in General Election Mean Percent Vote<sup>a</sup>  
(Multiple Classification Analysis)

	1970-74		1976-80	
Overall Difference between Males and Females (Male-Female % Vote)	12.9 <sup>b</sup>	6.6 <sup>c</sup>	9.1 <sup>b</sup>	2.2 <sup>c</sup>
Main Effects	Eta	Beta	Eta	Beta
Sex	.18	.09**	.13	.03
Urbanization	.11	.05*	.10	.05*
Party	.39	.25**	.37	.16**
Incumbency	.68	.60**	.72	.67**
Multiple R <sup>2</sup>	.53		.55	
Two-Way Interactions	F		F	
Sex-Urbanization	0.7		2.7*	
Sex-Party	5.9**		1.1	
Sex Incumbency	1.2		1.2	
Multiple R <sup>2</sup> Increment (All interactions)	.02		.02	
Total Multiple R <sup>2</sup>	.55		.57	
N	1542		1626	

\*\* significant at < .01

\* significant at < .05

<sup>a</sup> Wyoming is again omitted due to its multimember districts

<sup>b</sup> Simple difference

<sup>c</sup> Adjusted for effects of urbanization, party and incumbency. Adjusted differences controlling only for incumbency are 6.7 in 1970-74, and 2.8 in 1976-1980, a difference significant at .02.

REFERENCES

- Adams, W.C. (1975) "Candidate Characteristics, Office of Election and Voter Response," Experimental Study of Politics 4 (July): 76-91.
- Ambrosius, Margery M. and Susan Welch (1981) "Women and Politics at the Grassroots," paper presented at the Annual Meeting of the Western Social Science Association, April, San Diego.
- Baxter, Sandra and Marjorie Lansing (1980) Women and Politics: The Invisible Majority. Ann Arbor: The University of Michigan Press.
- Brewer, Margaret, Judy Clay and Robert Darcy (1981) "Women and Men Candidates in Local Elections," paper presented at the Annual Meeting of the Western Social Science Association, April, San Diego.
- Calvert, Jerry (1979) "Revolving Doors: Volunteerism in State Legislatures," State Government 52 (Autumn): 175.
- Clark, Janet (1981) "Women in New Mexico Politics," paper presented at the Annual Meeting of the Western Social Science Association, April, San Diego.
- Darcy, Robert and Sarah Slavin Schramm (1977) "When Women Run Against Men," Public Opinion Quarterly 41 (Spring): 1-12.
- Deber, Raisa (1982) "'The Fault Dear Brutes,': Women as Candidates in Pennsylvania," Journal of Politics 44 (May): 463-79.
- Diamond, Irene (1977) Sex Roles in the Statehouse. New Haven: Yale University Press.
- Dubeck, Paula (1976) "Women and Access to Political Office: A Comparison of Female and Male State Legislators," The Sociological Quarterly 17 (Winter): 42-52.

- Ekstrand, Laurie and William A. Eckert (1981) "The Impact of Candidate's Sex on Voter Choice," Western Political Quarterly 34 (March): 78-87.
- Erskine, Hazel (1971) "The Polls: Women's Role," Public Opinion Quarterly 35 (Summer): 275-290.
- Ferree, Myra (1974) "A Woman for President?: Changing Responses 1958-1972," Public Opinion Quarterly 38 (Fall): 390-399.
- Gitelson, Idy and Alan Gitelson (1980-81) "Adolescent Attitudes toward Male and Female Political Candidates: An Experimental Design," Women and Politics 1 (Winter): 53-64.
- Githens, Marianne and Jewel Prestage (1978) "Women State Legislators: Styles and Priorities," Policy Studies Journal 7 (Winter): 264-70.
- Hedlund, Ronald D., Patricia K. Freeman, Keith E. Hamm and Robert M. Stein (1979) "The Electability of Women Candidates: The Effects of Sex Role Stereotypes," The Journal of Politics 41 (May): 513-524.
- Hill, David B. (1980) "A Time Series Analysis of Female Representation in the Legislatures," paper presented at the Annual Meeting of the Midwest Political Science Association, Chicago, Illinois, May.
- Karnig, Albert and B. Oliver Walter (1976) "Elections of Women to City Councils," Social Science Quarterly 56 (March): 605-613.
- Karnig, Albert and Susan Welch (1979) "Sex and Ethnic Differences in Municipal Representation," Social Science Quarterly 60 (December): 465-481.
- King, Elizabeth G. "Women In Iowa Legislative Politics," in Marianne Githens and Jewel L. Prestage, eds. (1977) A Portrait of Marginality: The Political Behavior of the American Woman. New York: David McKay Company.

- Kirkpatrick, Jeanne J. (1974) Political Woman. New York: Basic Books, Inc.
- Lakeman, Enid (1976) "Electoral Systems and Women in Parliament," The Parliamentarian 57 (July 1976): 159-162.
- Laramie Sunday Boomerang (1982). June 27, p. 20.
- Lawson, Peggy (1968) Few are Chosen. Boston: Houghton-Mifflin.
- McCrorry, Nancy (1979) "The Proportion of Women in Local Political Office: A Structural Explanation and Causal Model," paper presented at the Annual Meeting of the Southwestern Political Science Association, Ft. Worth, Texas, March.
- Merritt, Sharyne (1977) "Winners and Losers: Sex Differences in Municipal Elections," American Journal of Political Science 21 (November): 731-43.
- Merritt, Sharyne (1980) "Recruitment of Women to Suburban City Councils: Higgins vs Chevalier," in Debra Stewart, ed., Women in Local Politics Metuchen, New Jersey: Scarecrow.
- Mezey, Susan G. (1978) "Does Sex Make a Difference? A Case Study of Women in Politics." Western Political Quarterly 31 (December): 492-501.
- Mezey, Susan (1980) "The Effects of Sex on Recruitment: Connecticut Local Offices," in Debra Stewart, ed., Women in Local Politics. Metuchen, New Jersey: Scarecrow.
- Milner, Lawrence and Lillian Noyes (1980) "Winners and Losers: Women Candidates for Municipal Elections Revisited," paper presented at the Annual Meeting of the Midwest Political Science Association, Chicago, April.

- Miller, Lawrence (1981) "Winners and Losers: Another Look at Sex Differences in Municipal Elections," paper presented at the Annual Meeting of the Southern Political Science Association, Memphis, Tennessee, November.
- Pierce, Neil R. (1982) "Women Legislators aim for Power Slots," Public Administration Times 5 (July 15):2.
- Porter, Mary C. and Ann Matasar (1974) "The Role and Status of Women in the Daley Organization," in Jane Jaquette, ed. Women in Politics. New York: Wiley.
- Rule, Wilma (1981) "Why Women Don't Run: The Critical Contextual Factors in Women's Legislative Recruitment," Western Political Quarterly 34 (March): 60-77.
- Schramm, Sarah Slavin (1981) "Women and Representation: Self-Government and Role Change," Western Political Quarterly 34 (March): 46-59.
- Seligman, Lester (1961) "Political Recruitment and Party Structure: A Case Study," American Political Science Review 55 (March):77-86.
- Sigelman, Lee and Carol Sigelman (1982) "Sexism, Racism and Ageism in Voting Behavior," Social Psychological Quarterly, in press.
- Stewart, Debra (1980) Women in Local Politics, Metuchen, New Jersey: Scarecrow.
- Van Hightower, Nikki R. (1977) "The Recruitment of Women for Public Office," American Politics Quarterly 5 (July): 301-314.
- Welch, Susan (1977) "Women as Political Animals? A Test of Some Explanations for Male-Female Political Participation Differences," American Journal of Political Science 21 (November): 711-729.
- Welch, Susan (1978) "Recruitment of Women to Public Office: A Discriminant Analysis," Western Political Quarterly 31 (September): 372-380.

- Welch, Susan and Albert K. Karnig (1979) "Correlates of Female Office Holding in City Politics," The Journal of Politics 41 (May): 478-491.
- Welch, Susan and Philip Secret (1981) "Sex, Race and Political Participation," Western Political Quarterly 34 (March): 5-16.
- Welch, Susan and Lee Sigelman (1982) "Changes in Public Attitudes toward Women in Politics," Social Science Quarterly, 63 (June): 312-322.
- Werner, Emmy E. (1968) "Women in the State Legislatures," Western Political Quarterly 21 (March): 40-50.
- Williams, Christine (1981) "Women in Congress: Political Roles and Recruitment to Public Office," Paper presented to the Annual Meeting of the Midwest Association for Public Opinion Research, Chicago, October.