

Women in Professional and Managerial Occupations and
Female Political Representation in the House of Representatives

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Research Question

Women comprise the majority of the population in most states (Niven 2). According to the United States Census Bureau, women comprised 50.9% of the United States population and cast 53.4% of ballots nationwide in 2000. Yet, in the 106th Congress (1999-2001), women held only fifty-six of the 435 seats in the House of Representatives, comprising 12.8% of the 435 members, according to the Center for American Women and Politics. Currently, in the 108th Congress, women hold only sixty of the 435 seats in the House of Representatives, comprising 13.8% of the 435 members.

Female political representation in the House of Representatives got its biggest boost in 1992, “the Year of the Woman,” when the number of women elected to the House of Representatives rose dramatically to forty-seven from twenty-eight in 1990 (Dolan 272). Since then, the average increase in female representatives has been a stagnant three female representatives per election year.

Furthermore, only twenty-six of the fifty states elected women to the House of Representatives in the 108th Congress, according to the Office of the Clerk of the U.S. House of Representatives. The Center for American Women and Politics reports that California, which has elected twenty-eight women to the House of Representatives, leads the race in electing women to Congress. New York has elected twenty; Illinois has elected eleven; Florida has elected eight; Connecticut has elected six. Five states—Delaware, Iowa, Mississippi, New Hampshire, and Vermont—have never elected a woman to Congress.

The literature on women's candidacies focuses on political and electoral factors, such as campaign receipts and electoral systems, which can be assessed in a more straightforward manner than voters' attitudes. Voters' attitudes about women are difficult to measure precisely because attitude measures are subjective and are susceptible to respondents' desires to project a positive image. Additionally, people do not have fixed opinions about issues; rather, they generate opinion statements spontaneously, using information that is most salient at the time (Zaller 1). If asked about an issue to which they have not given much thought, people tend to provide answers that are "rough and superficial"—answers that vary with question wording or ordering and do not remain consistent across measures (Zaller 28).

This study aims at determining the effect gender bias on the vote shares of women candidates for the House of Representatives. In order to determine quantifiably the level of gender bias in the population, this study will use as an indicator the percentage of females in professional, managerial and related occupations in each of the 435 districts. By linking women's socioeconomic success with a district's attitudinal characteristics, one can assess voters' attitude toward women in politics in a certain district. The question, then, becomes the following: How is female socioeconomic success related to female political representation?

II. Significance of Research

The question at hand has significant implications for policies governing the lives not only of women, but also of entire populations. The different experiences that women have encountered make their presence in legislatures important. They possess insight

into and knowledge of certain issues that men may not be fully aware of (Darcy, Welch and Clark 16). Thus, as Kenworthy and Malami conclude, increasing female political representation "might well improve the quality of policy making [...] by heightening the diversity of views and experiences among representatives" (260).

Previous research has established that female legislators differ substantially from male legislators, and such contrasts translate into differences in policy opinions, issue positions, and legislative behavior (Burrell; Kenworthy and Malami; Niven). Kenworthy and Malami argue that women "help steer political debate" in legislatures (260). Niven notes that women show a greater concern for and are more willing to act on issues that are "of specific relevance to women, such as reproductive rights, child care, rape and domestic violence, pay equity, and discrimination/harassment" (3). Caiazza has found a strong correlation between female representation and women's rights and resources. (See Table 1). Furthermore, since female legislators place a greater emphasis on the support of their women constituents than male legislators, they are "likely to maintain such differences [in legislative priorities] in an effort to represent their core constituency" (Reingold 1992 qtd. in Niven 3). Not only do women introduce more "women's issue" legislation than men, they are also more successful in obtaining passage of their legislation in this area than are men (Niven 3).

Female legislators also exhibit legislative behavior that is distinct from that of male legislators. In a 1994 nationwide study of state legislative committee chairs, Rosenthal found that female chairs emphasized collaboration, fairness and discussion in legislative processes, while male chairs used their power to ensure dominance of their position, with little concern for minority views (Rosenthal qtd. in Niven 5). With their

distinctive priorities and legislative styles, women alter not only the discourse, but also the process of legislation.

An increase in female political representation has implications beyond the individual state legislatures. Darcy, Welch and Clark argue that "if the female half of the human race enters into political competition with the same intensity as the male half, the quality of political leadership will necessarily improve because of the larger number of individuals involved" (16). With more women in state legislatures, government will more closely resemble the population. John Adams suggested that a representative body "should be an exact portrait, in miniature, of the people at large, as it should think, feel, reason and act like them" (Pitkin, qtd. in Darcy, Welch & Clark 17). Thus, with the political participation of more than half of the population limited to "one-fifth or less of the legislative seats," the legitimacy of legislatures in the United States, has been questioned (Niven 3).

III. Literature Review

Gender Stereotypes

One explanation for the under-representation of women in legislatures focuses on attitudinal characteristics of the electorate. Political culture affects a population's receptiveness to female representation (Norrander and Wilcox 1998). Another related, but distinct attitudinal characteristic, is the set of gender-role attitudes to which voters are exposed. In some places, for instance, voters have been socialized to view politics as a man's world (Campbell, et al)

Gender stereotypes are more often a disadvantage than an advantage for female candidates. In a 1993 study, Huddy and Terkildsen found that women candidates are subject to the same stereotypes as are women in general—stereotypes that preclude them from characterization as assertive, tough and aggressive individuals (123). Such qualities, which have been found to be advantageous for political office, are more often attributed to men (Huddy and Terkildsen 512). On the contrary, women are characterized as "warm, gentle, kind and passive," and such traits are generally not considered beneficial to those seeking office (Huddy and Terkildsen 512). While voters punish the lack of masculine traits in candidates, they do not reward the presence of feminine attributes.

Voters also have stereotypes about areas of issue expertise for men and women. Whereas men are seen as more competent in economics and the military, women are considered more proficient with issues concerning poverty or healthcare (Huddy and Terkildsen 505). To the disadvantage of women, politicians at higher levels of office are believed to have to deal with military and economic issues, while compassion issues—stereotypical issues of female expertise—are considered as the least likely to confront politicians (Huddy and Terkildsen 511).

Causes of Gender Stereotypes

Gender stereotypes result from a lack of information about women's viability as candidates or effectiveness as legislators. As a result, voters develop baseline gender preferences, which are shortcuts to decision-making about candidates based on their gender (Sabonmatsu 31). Baseline gender preferences play a more significant role in

low-information elections (Sabonmatsu 31). When voters know little about candidates' issue positions, they rely on stereotypes to evaluate candidates. "Women candidates are penalized directly for higher office when voters have little information about them and are therefore more likely to stereotype them as typical women" (Huddy and Terkildsen 505).

Uncertainty also occurs in terms of voters' ideas about the competence of women to hold political office. With a lack this type of information, voters default to stereotypes. Since the stereotypical government official is male, women are punished. In a 1978 study on perceptions of women as public figures, Mezey interviewed 42 politicians about the assets and liabilities of female candidates and office-holders. Female politicians indicated that among their greatest hurdles are voters' perceptions of them as "not [being] smart enough to understand the issues" or being too flighty, weak and emotional (Mezey 498).

Effects of Gender Stereotypes

The prevalence of gender stereotypes is by no means insignificant. As a result of gender stereotypes "about traits, beliefs and issue competency," the electorate develops a "baseline preference to support either male or female candidates" (Sabonmatsu 31). Baseline preferences for male candidates stem from negative stereotypes about the traits and attributes of female candidates as well as positive stereotypes of male candidates (Sabonmatsu 31). Baseline preferences are difficult to overcome, especially when there is a lack of contradictory information.

The prevalence of gender stereotypes causes uncertainty about women's candidacies as described in Zaller's Resistance Axiom:

People tend to resist arguments that are inconsistent with their political predispositions, but they do so only to the extent that they possess the contextual information necessary to perceive a relationship between the message and their predispositions (44).

Given the above axiom, voters would be able to perceive a relationship between their predispositions ("politics is for men") and the message (women's campaigns) if gender stereotypes remain salient. Given that the stability of mass percepts depend on how well they are woven into the fabric of society, places where stereotypes are stronger enable more voters to access the stereotypes when evaluating women candidates. (Campbell, et al., 62)

Stereotypes may impede voters' receptiveness of female candidacies, causing voters to ignore relevant political information. The prevalence of negative stereotypes about women may prevent voters from giving serious consideration to the issue positions or relevant political and leadership experiences of female candidates. This, in turn, leads to a situation of low information, in which voters are likely to use non-policy factors in making voting decisions (Alvarez, 41). Alvarez cites uncertainty about candidates' positions as an impediment to vote choice (41). According to Alvarez's first hypothesis, "the greater the individual's uncertainty about the candidate's policy positions, the lower their utility for the candidate and hence the lower their probability of supporting the candidate" (36). The above hypothesis was supported by data that the more uncertain a voter was about Carter or Ford, the less likely he supported the candidate (Alvarez 113).

Since gender stereotypes lead voters to remain uncertain of candidates' issue positions, women are placed at a disadvantage. Despite their efforts to counteract stereotypes and project images of strength and competence, which are vital to being elected, voters default to stereotypes about women's role in society. Even if women emphasize the economy and the military in their campaigns, voters may ignore this information and revert to non-policy factors, such as, gender, when evaluating candidates.

Gender Stereotypes and the Media

The media exacerbates the interplay between lack of information and gender stereotypes. The media is both an asset to some candidacies and a barrier to others. It affects what and how much voters learn about candidates and it influences the criteria that voters use to evaluate candidates. With such power at the media's disposal, its reliance on stereotypes can be detrimental to certain candidacies, i.e., if stereotypes cause a gender difference in amount and type of campaign coverage (Kahn and Goldenberg 181).

Differences in campaign coverage, in turn, have the potential to affect voters' opinions and preferences. The amount of media coverage affects voter recognition of candidates. Additionally, the type of coverage given to candidacies has a great impact on voters' evaluations of candidates. For instance, horse-race coverage of campaigns rouse concerns among the electorate about the viability of such campaigns and the electability of the candidates involved; this, in turn, leads to negative candidate evaluations (Kahn and Goldenberg 184).

In a study of U.S. Senate races in 1984-1986, Kahn and Goldenberg found that female candidates, whether they are challengers or incumbents, are more likely to be disadvantaged by the media (195). The media does not only devote less attention to races with female candidates, but it also tends to cover such races in a horse-race fashion (190). As a result, voters suffer a lack of issue information with which to evaluate candidates (191). Since voters do not have sufficient issue information, they cannot make policy evaluations of candidates or predict how candidates will vote once in office. Thus, voters revert to stereotypes. The above is consistent with Alvarez's third hypothesis, which states, "The greater the voter's uncertainty about the candidate's policy positions, the more likely it will be that they will rely upon nonpolicy factors in their decision making" (41).

Thus, the media's reliance on stereotypes has an effect that is two-fold. First, by providing salient stereotypical information to voters, the media promotes resistance to women candidates. Second, in failing to provide voters with female candidates' issue positions, the media does not contribute to the eradication of stereotypes. Rather, the media may hinder the electorate from giving women candidacies serious consideration. The media's reliance on stereotypes perpetuates uncertainty in voters about the competence and issue position of women candidates, and in the absence of both types of information, stereotypes overshadow women's candidacies.

The Performance of Female Candidates

Vote Share

In a study of open-seat primary elections for the House of Representatives from 1968 through 1990, Barbara Burrell found no significant difference in the percentages of male and female candidates who won open-seat primaries (1992, 498). For instance, in the period from 1968-1972, 37% of male candidates and 34% of female candidates who ran won. While male candidates received an average of 25.2% of the total votes, women received 24.9% (Burrell 497). Burrell concluded that female candidates did as well as their male counterparts in acquiring votes and winning open-seat primaries.

Other research support Burrell's findings. Darcy, Welch and Clark found that sex is not a significant factor in general election outcomes for seats in Congress. Their data showed that female nominees of the major parties average the same percentage of votes as their male counterparts. Janet Clark found that the difference voter support for male and female candidates has declined to an insignificant level since the 1970's (1991, 74). That is, when incumbency and party are controlled, voters are just as likely to vote for women as for men in both local and national elections (Clark 74).

Political Parties

Political context has a significant effect on female candidacies, causing a differential in the participation rates of Democratic and Republican candidates. The Democratic Party produces a larger pool of female candidates than the Republican Party (Burrell 502). 65% of Democratic women, as compared with 43% of Republican women,

were likely to run in districts where the retiring incumbent was from their party. Burrell claims that this may be because Democratic nominees are more likely to win than their Republican counterparts. Carol Nechemias provides an explanation, stating that “the recruitment pool of well-educated women professionals has expanded significantly, and these women are more likely than their male colleagues to embrace liberal positions on political, religious, economic and social issues” (1987,127).

While previous research shows that women are more likely to run as Democrats, it remains unknown whether women win a greater percentage of votes as Democrats. Burrell (1992) hypothesizes that they do. However, no empirical data has shown this to be the case. Studying the interaction effect of gender and political party on vote share will allow us to determine whether being a Democrat poses additional advantages for female candidates.

Campaign Receipts

Research has shown that female candidates raise the same amounts of money as their male counterparts (Burrell 1985). In a study of the 1980 Congressional elections, Uhlaner and Scholzman (1986) found that candidate gender had no independent effect on campaign receipts. Instead, the proportion of campaign receipts was found to be more strongly related to candidate status than to gender. If men appeared to have raised more money, it was because of their incumbency status. However, in comparing women challengers to their male counterparts, the researchers found that women challengers raised the same amount as men relative to their opponents (Uhlaner and Scholzman 43). Furthermore, the researchers found that women candidates do not have unusual difficulty

raising money compared to men candidates when candidate status is controlled (Uhlener and Scholzman 44). Controlling for candidate status, women collected a slightly higher proportion of their campaign funds from PACs. In terms of party contributions, women candidates from both major parties are at a negligible disadvantage (Uhlener and Scholzman 45).

Brian Werner's (1997) findings provide further support for the claim that women are not at a disadvantage in terms of campaign receipts. In studying the campaign finances for candidates to the state legislatures in Missouri, Pennsylvania and Washington, he finds that regardless of the type of candidacy, female candidates were raising an equal or greater amount of funds as their male counterparts (85). Further, from 1988, open seat female candidates were raising significantly greater amounts than their male counterparts. This gap, however, is attributable to a drop in the fundraising of male candidates, rather than an increase in the funds raised by the female candidates (89).

Previous research on campaign receipts does not address the effects of candidates' receipts on vote shares. Studying the interaction effect of candidate gender and campaign receipt on vote share will allow us to determine whether women garner more or less votes than their male counterparts who receive an equal amount of funds.

Campaign Spending

While women are not at a disadvantage when it comes to fund raising, there has been a significant gap between men and women in the vote shares received in proportion to money raised. Joanne Connor Green (1997) finds that although female candidates in the 1980 House of Representatives election fundraised competitively, they received fewer votes in return for their disbursements (43). In the period ranging from 1982 to 1988,

only 13% of women who spent less than \$200,000 won, while 25% of men under similar circumstances were successful (43). Furthermore, at all levels, during the 1982-1988 time period, women raising funds equal to their male counterparts were less successful electorally. A multivariate analysis showed that for every \$100,000 spent, male candidates received an additional 1.8% increase in vote share, while women enjoyed no such advantage (Green 45).

Such disadvantage may no longer be as persistent as it was in the 1980's. In an analysis of the 1992 and 1994 House of Representatives elections, Green finds that women were "more likely to outspend their opponents and were substantially more likely to win" (41). Green attributes the disappearance of the gap in vote returns to an overall change in the political environment toward greater acceptance for women candidates. In making this conclusion, Green relied on a multivariate analysis that showed that the prior political experience of female candidates had a significant positive effect on their vote shares in the 1992-1994 period, but not in the 1982-1988 period.

Candidacy

Incumbency is "the single best predictor of victory in a congressional race" (Uhlener and Scholzman 32). Political incumbents enjoy significant advantages over their challengers in terms of name recognition, voter appeal, resources, and media exposure (Clark 74). In Uhlener and Scholzman's study of the 1980 Congressional election, over 90% of incumbents won reelection (32). Furthermore, while the average incumbent raised \$182,029, the average challenger received only \$102,543 (Uhlener and Scholzman 32).

This advantage, however, is skewed towards men, as men are much more likely to be incumbents than women. In Uhlaner and Scholzman's sample, there were 15 female incumbents, compared with 288 male incumbents (48). In addition, there were only six women among eighty-four open-seat candidates (Uhlaner and Scholzman 84). Clark predicts that it will take decades for women to achieve parity with men in terms of incumbency (74). However, once they win, "their example evidently makes it easier for other women to win elections later" (McManus, qtd. in Clark 74).

Socioeconomic Bias in Congress

Legislators are traditionally drawn from "the ranks of the highly educated professional and business classes" (Fowler 431.) The socioeconomic bias persists even as Congress becomes more diverse in terms of race, ethnicity and gender. In an examination of the 104th Congress, Fowler found that seventy-five percent of members had backgrounds in business, banking or law (431). The remaining twenty-five percent were in education, journalism or public service prior to being elected (Fowler 431).

Socioeconomic factors in districts also influence female candidacies. Burrell found that communities throughout the country vary in their support for female candidates. This, in turn, affects the number of women who choose to run in their districts (Burrell 502). Women are more likely to be recruited from urban districts (Rule 1981) and from districts outside the South (Burrell 503). In addition, wealthier districts, those with higher proportions of African Americans, and Democratic districts are more likely to have had female candidates (Burrell 503). Furthermore, women from both major

parties are more likely to run in wealthier districts, as measured by median family income (Burrell 503). Such districts, Burrell argue, “are more likely to have a larger pool of professionally employed women with advanced degrees eligible to run for high-level office” (503).

Women in Professional Occupations

Using the intuition of the Bayesian model of political information, Alvarez argues that voters' prior perceptions or information "can be updated with the new information, yielding revised, posterior beliefs" (41). The solution to uncertainty, as Alvarez describes it, is new information to replace the old; i.e., Old information in the form of gender stereotypes can be replaced by new information that counteracts the stereotypes.

Such new information may come in the form of an increase in either the number of women in professional and managerial occupations or the proportion of women relative to men in professional and managerial occupations. In *the American Voter*, Campbell, et al argue that a changing political environment affects perception of political objects (43). Further, changes in the external world have impacts on political attitude (48). For instance, a prosperous economy during the Republican administration of the 1950's weakened the associations in voters' minds between Republican government and economic distress (Campbell, et al, 48). Campbell, et al use the "funnel of causality" to explain the political effects of external events upon voters (25). The authors defined external conditions as those events "that warrant a place in the funnel because they are causally significant for later behavior, yet which currently lie beyond the awareness of the actor" (27). The authors assume that most events or conditions that influence

behavior are perceived by the actor before the behavior takes place, and that the behavior is a reaction to the perceived events (27). Affects are "placed in contact with all the political cognitions and predispositions that had been formed independently [...]" (31).

Given the above, if an increase in the number of women, or their proportion relative to men, in professional occupations is considered a change in the external world, then voters' awareness of the increase would eventually be combined with political cognitions and predispositions to result in a positive affect towards women candidate i.e., voters would be more receptive of female candidacies. The salient presence of women in professional occupations provides information to voters--information that women are capable of holding positions of influence--that may counteract gender stereotypes. Such an occurrence would be consistent with Alvarez' argument that when prior information is incorrect and new information is precise, the voter adjusts his evaluations of a candidate in the direction of the new and precise information (49).

There are several reasons that an increase in the proportion of women in professional and managerial jobs would cause voters to adjust their evaluations in favor of women candidates. The presence of women in higher-level occupations signifies a higher degree of education and achievement. There is general agreement that education and occupation are important qualifications for elective office (Carroll 66). Elected political officials are most often drawn from professional and managerial occupations. Furthermore, lawyers, educators, journalists and business professionals tend to be heavily represented in elected legislative bodies (Norris qtd. in Kenworthy and Malami 240).

Previous research has shown a parallel relationship between women entering the legal profession and women running for political office. For instance, when the

percentage of women in legal professions was 3 percent in 1970, women comprised 4 percent of state legislators. As the percentage of women in legal professions increased to 20 percent in 1988, the percentage of women in state legislatures rose to 17 percent (Darcy, Welch & Clark 113).

However, previous research has not examined the relationship between female socioeconomic success as measured by the presence of women in professional and managerial occupations and female political representation in the national legislature. Further, previous research has not examined the effect of female socioeconomic success on female candidate's vote shares. The question of how female socioeconomic success in a given district affects the electoral success of female candidates in that district has not been answered. It may be prudent to examine this relationship since doing so may inform us of the conditions under which female representation can be improved.

IV. Hypothesis

I hypothesize that a high percentage of women in professional occupations creates a political climate that is conducive to women's candidacies. Thus, in districts where more women work in professional occupations, gender biases are less prevalent and women are more successful candidates. In such districts, it may be the case that gender stereotypes have been counteracted by stereotypes about people in professional occupations—stereotypes of being competent, assertive, and self-confident. As a result, voters in districts where many women are in professional occupations may be more receptive to female candidates.

In districts where women have achieved a higher proportion of professional and managerial occupations, there may be less bias against women in general. The low bias, which allows women to advance their careers, may carry over to politics. As a result, voters in these places are more receptive to women candidates. In such cases, positive stereotypes about the competency and leadership skills of those in professional occupations may have served to eradicate gender stereotypes. Thus, voters' evaluations of candidates are less likely to be affected by negative stereotypes about women.

Because stereotypes are less prevalent in these cases, voters are able to pay more attention to candidates' issue positions and use these in evaluating candidacies. Alvarez argues that voters who learn the most from campaigns are those who are most receptive and whose preferences are most malleable. Thus, such voters' perceptions change in response to information from campaigns (Alvarez 202). Such circumstances may account for the success of the candidacies of Boxer and Feinstein in California in 1992. Both candidates emphasized crime, the environment, unemployment and abortion in their campaigns, as did male candidates running concurrently (Ansolabehere and Iyengar 39). Since California is ranked among the states having the highest proportion of women in professional occupations, gender stereotypes may be less prevalent there and did not hinder voters' receptiveness to the candidates' issue positions.

V. Methods

Data for this project were collected from various electronic sources and uploaded into STATA for analysis. Data on the 2000 House of Representatives election was gathered from the Federal Elections Commission website, which contained information for each candidate's financial activity, including net disbursements, net receipts, and cash

on hand. This data was merged with data on each candidate's vote share, also compiled from the Federal Elections Commission. The latter data set included tallies of primary, runoff and general results for each candidate. A manual renaming of candidates was necessary at this step, as candidate names were not coded uniformly between the two sources. A second merge was then performed.

Data on district characteristics was available through the United States Census Bureau. A table containing each district's socioeconomic characteristics was compiled using a series of drop-down menus on the Census Bureau website. The table was then downloaded as an Excel file and uploaded into STATA. Census Bureau data were then merged into the elections data.

Variables used for analysis are as follow:

Dependent Variable: *Vote Shares*

Vote shares were measured as the percentage of votes won by a candidate in the 2000 general election, as reported by the Federal Elections Commission. Since together, they comprised approximately 100% of the total votes, only Democratic and Republican candidates' vote shares were assessed.

Explanatory Variables:

Female MPR/Total MPR

Gender bias was measured as the proportion of women professionals to the total in professional and managerial occupations in each of the 435 districts during the 106th Congress. This data is available through the United States Census Bureau. Gender bias

has been conceptualized thusly since the percentage of women in professional and managerial occupations provides a more concrete and objective indication of the status of women in a district than would a survey measure on gender bias. A district's willingness to have women hold professional and managerial occupations reflects, to a certain extent, that district's attitude toward women. A high proportion of women relative to men in professional occupations may help eradicate gender biases against women. If so, we can expect vote shares to be higher for women in districts where there is a higher proportion of women in professional occupations.

Female MPR in District Population

Measured as the number of females in professional, managerial and related occupations in a district, this variable is a variation on the gender bias measure. Unlike the previous variable, this variable does not control for the presence of males in the professional and managerial occupations. However, the mere presence of women in the professional sector, regardless of the presence of men, may have an effect on the electorate's perception of female leadership, education and achievement. I expect vote shares for female candidates to be higher in districts where there are more females in professional occupations.

Females in District Population

Measured as the proportion of females to the total population in a district, this variable measures the effect of gender on voting behavior. Since Niven argues that female legislators keep stronger ties with the female electorate, and are more likely to advance

women's issues, I expect women's vote shares to be higher in districts with a higher percentage of female voters.

Campaign Spending

Data on campaign spending for the 2000 House of Representatives general election is available through the Federal Elections Commission. This variable measures the net disbursements of each candidate for his/her 2000 House of Representatives campaign. I expect higher vote shares for candidates who spend more. Further, I expect men to spend more and have higher returns for the money they spend.

Campaign Receipt

Data on campaign receipts for the 2000 House of Representatives general election is available through the Federal Elections Commission. This variable measures the net receipt of each candidate for the 2000 House of Representatives campaign. I expect higher vote shares for candidates who received higher amounts. Further, I expect men to raise more funds than women and have higher returns for the money they spend.

Political Party

Coded as "0" for Republican and "1" for Democrats.

Gender

Coded as "0" for males and "1" for females.

Incumbency

Incumbency will be controlled for, as this variable has been shown to have a significant effect on the election of a candidate (Krashinsky and Milne). Krashinsky and Milne found that incumbency has a significant influence on voting behavior, and that the effects are more prevalent in House elections than in Senate or presidential races (340). Since World War II, incumbents have had a reelection rate of above 90% (Goldenberg and Traugott 319). Thus, although men hold a higher number of House seats, it may be because they are incumbents and gender bias may not be a significant factor in voting behavior.

Interactions

Gender and Incumbency- This interaction will measure the effect of gender on the vote shares of female incumbents. While incumbency is expected to have a positive effect on female candidates' vote shares, no additional advantage is expected for female incumbents relative to male incumbents. An additional advantage may be expected in districts where there is a higher percentage of female professionals relative to male professionals, or in districts where there are generally more female professionals compared with other districts.

Gender and Open Seat- This interaction will measure the effect of gender on the vote shares of female candidates running in open seat races. Because males are more likely to be incumbents, and because incumbency is a major factor in election victories, open seat races are expected to have a positive effect on female candidates' vote shares. However, an additional advantage of female candidates in relation to male candidates in open seat races is not expected.

Gender and Political Party- This interaction will assess the relationship between vote share and the candidate's political party based on gender. It will allow us to determine whether, consistent with Burrell's (1992) finding, women are more successful as Democrats.

Gender and Net Disbursements- This variable will measure the differing effect of a candidate's net disbursements on vote shares depending on candidate gender. In other words, does a candidate get a higher return of votes for money spent depending on his/her gender? I expect gender to have a negative effect on female candidates' vote shares based on net disbursements, i.e., I expect female candidates to receive less votes for the money they spend.

Gender and female professionals/total district population- This interaction will measure the effect of the number of female professionals in a district on the vote share of female candidates running in that district. I expect female candidates to have an additional advantage in districts with a relatively high number of women in professional and managerial occupations.

Gender and female professionals/total professionals- This interaction will measure the effect of the percentage of female professionals in a district on the vote share of female candidates running in that district. I expect female candidates to have an additional advantage in districts with a high proportion of women relative to men in professional and managerial occupations.

Gender and females in population- This variable will allow us to determine whether a higher percentage of females in the district population has an effect on female candidates'

vote shares. I expect female candidates to have higher vote shares in districts where there are more women in the population.

Model

The following model will be used to assess the relationship among the variables:

$$\begin{aligned} \text{Vote Share} = & \text{gender} + \text{incumbency} + \text{open-seat} + \text{political party} + \text{net} \\ & \text{disbursements} + \text{female professionals/total district population} + \text{female} \\ & \text{professionals/total professionals} + \text{females in population} + \text{gender} * \text{incumbency} \\ & \text{gender} * \text{open-seat} + \text{gender} * \text{political party} + \text{gender} * \text{net disbursements} + \\ & \text{gender} * \text{female professionals/total district population} + \text{gender} * \text{female} \\ & \text{professionals/total professionals} + \text{gender} * \text{females in population}. \end{aligned}$$

VI. Data Analysis and Results

A series of bi-variate analyses were performed to assess the relationships of the various variables. A regression on vote shares and candidate gender yielded no significant results. With a t-score -0.51, gender by itself does not have a significant effect on vote shares.

The percentage of females in the electorate alone did not have a significant effect on the vote shares of men ($t=1.09$) and women ($t=-1.35$), nor on vote shares in general ($t=0.44$). An examination of the relative t-scores suggests that more women in a district may actually diminish the vote share of women candidates.

As expected, the type of candidacy had significant effects on vote share. (See Table 2). Incumbency had the most significant effect both on vote shares in general ($t=32.82$.) and on the vote shares of males ($t=31.75$) and females ($t=9.67$). However, the advantage of incumbency enjoyed by males is significantly greater than that enjoyed by females. Contrary to conventional wisdom, data indicated that more women relative to men were incumbents (See Table 8). These results, however, are obtained without controlling for the fact that there were 1,111 male candidates running as incumbents as compared to 115 female incumbent candidates. Thus, the greater proportion of women incumbents who won is explained by the difference in the actual number of candidate in each category.

Open seat races also had a significant effect, raising vote shares overall ($t=12.04$) and votes shares of men ($t=12.05$) and women ($t=2.84$) separately. Again, the advantage is far more significant for men than for women. Only the interaction on gender and open-seat race is significant ($t=-2.41$), indicating that the advantage of competing in an open-seat race is significantly diminished for women, but the advantage of an incumbency ($t=-1.88$) is not.

Female candidates raised ($t=3.16$) and spent ($t=3.09$) more money than male candidates. (See Tables 6 and 7). These results, however, were obtained without controlling for incumbency. As data has shown, a higher proportion of female incumbents relative to male incumbents were successful. Since incumbents raise more money than challengers, the results were skewed by the higher proportion of female incumbents who won.

Campaign spending raised vote shares in general ($t=3.87$) and the vote shares of men ($t=3.76$.) It had no significant effects on the vote shares of women ($t=1.05$), however. (See Table 3). Similarly, campaign receipts had a significant positive effect on vote shares ($t=5.51$). As with campaign spending, campaign receipts had a significant effect on the vote shares of men ($t=5.36$), but not women ($t=1.46$). Neither the interaction of gender and net disbursement ($t=-0.39$) nor that of gender and net receipts ($t=-0.64$) was significant, indicating that women did not receive more or less votes than men for the money they spent or received.

Political party had no significant effect overall ($t=1.39$). However, being a Democrat had a significant positive effect on female candidates' vote shares ($t=2.37$). (See Table 4). In addition, data showed that districts in which the proportion of female professionals to total professionals was higher, Democrats are more likely to win ($t=3.77$), (See Table 5).

The gender bias indicator of female professionals/total professionals in the district yielded no statistically significant results. This indicates that women are not more likely to win in districts where there is a relatively high proportion of female professionals to total professionals. (See Table 10). Moreover, the interaction of gender with this variable did not yield statistically significant results ($t=-0.38$), indicating that there is no additional increase or decrease in women's vote shares when there is a higher percentage of female professionals.

However, a higher number of female professionals in a district increases overall vote shares ($t=7.13$), as well as those of males ($t=7.47$) and females ($t=2.10$). (See Table

9). The effect is greater for male candidates than female candidates and is significantly diminished by gender ($t=-2.69$).

A multivariate analysis yielded significant effects for gender ($t=2.40$), incumbency ($t=27.81$) and open seat races ($t=8.11$). The interaction on gender and political party yielded a significant effect for female Democrats ($t=2.90$). This indicates that being a Democrat increases the vote shares of female candidates. Finally, the interaction on gender and females in the electorate yielded a significant negative effect ($t=-2.04$), indicating that more women in the electorate may actually diminish women's vote shares. The proportion of female professionals to the total professionals in a district had a significant positive effect on vote shares overall ($t=4.60$). The percentage of female professionals in a district had a more significant positive effect ($t=11.30$). However, the interactions of these variables with gender yielded no significant effects, indicating that female socioeconomic success is not significantly related to female political representation. (See Table 11).

VII. Conclusion

The research presented in this thesis attempted to explain the relationship between female socioeconomic success and female political representation in the House of Representatives of the 106th Congress. The data indicate that while female socioeconomic success has a significant positive effect on vote shares overall, it has no direct relationship to female political success. The presence of females in the professional sector in general, and in relation to the presence of men, raises vote share for both male and female candidates. However, females do not gain an additional advantage

in terms of vote share in districts where women have achieved greater socioeconomic success.

At the beginning of this paper, I hypothesized that the presence of females in the professional occupations creates a political climate that is conducive to women's candidacies, thus leading to female political success through the reduction of gender bias. The hypothesis is denied when we examine the interactions between gender and the two gender bias indicators. In fact, when the presence of men in the professional domain is not controlled, female socioeconomic success appears to diminish female candidates' vote shares ($t=-1.59$). That is, when there are more women there are in professional and managerial occupations, less women are electorally successful.

Female socioeconomic success, however, has significant positive effects on men's vote shares. This suggests that higher female socioeconomic success leads to greater male political representation. A possible explanation may be that in districts where there is high female socioeconomic success, women do not find incentives to run for political office, and remain instead in the private sectors. It may be the case that politics is not an end in women's career perspectives, but a means toward attaining greater opportunities in the workforce. Thus, it may be the case that in places where women experience greater difficulties in entering the professional occupations, women candidates are more successful. Conversely, in districts where women have achieved high socioeconomic success, they leave politics to those who are traditionally more inclined to pursue it--men.

At the onset of this analysis, I expected to find a direct relationship between female socioeconomic success and female political representation. The findings in this research indicate that such a relationship does not exist. That is, neither a higher number

nor a greater percentage of women in professional and managerial occupations raises female candidates' vote shares. Further, female socioeconomic success actually increases male political representation. Moreover, female socioeconomic success raises vote shares overall, but with no significant advantage for women.

The relationship between female socioeconomic success and female political representation may be more complicated than can be accounted for by the model used in this research. The fact that female socioeconomic success increases vote shares overall indicates that women are not discriminated against in places where women are socioeconomically successful. The lack of a boost in vote share for women, however, shows that female socioeconomic success alone cannot account for greater electoral success. Further, the lack of a significant decrease in female candidates' vote shares shows that female socioeconomic success does not necessarily diminish female candidates' vote shares.

There may be a threshold above which female socioeconomic success gives females less incentive to run for office or voters less reason to elect females. Furthermore, since only one election cycle was examined, the results may not be representative of the actual relationships among the variables assessed. Nevertheless, this study has enhanced our understanding of the effects of female success in the professional sector on female political representation.

Tables

Figure 1. The Relationship between Women in Elected Office and Women-Friendly Policy

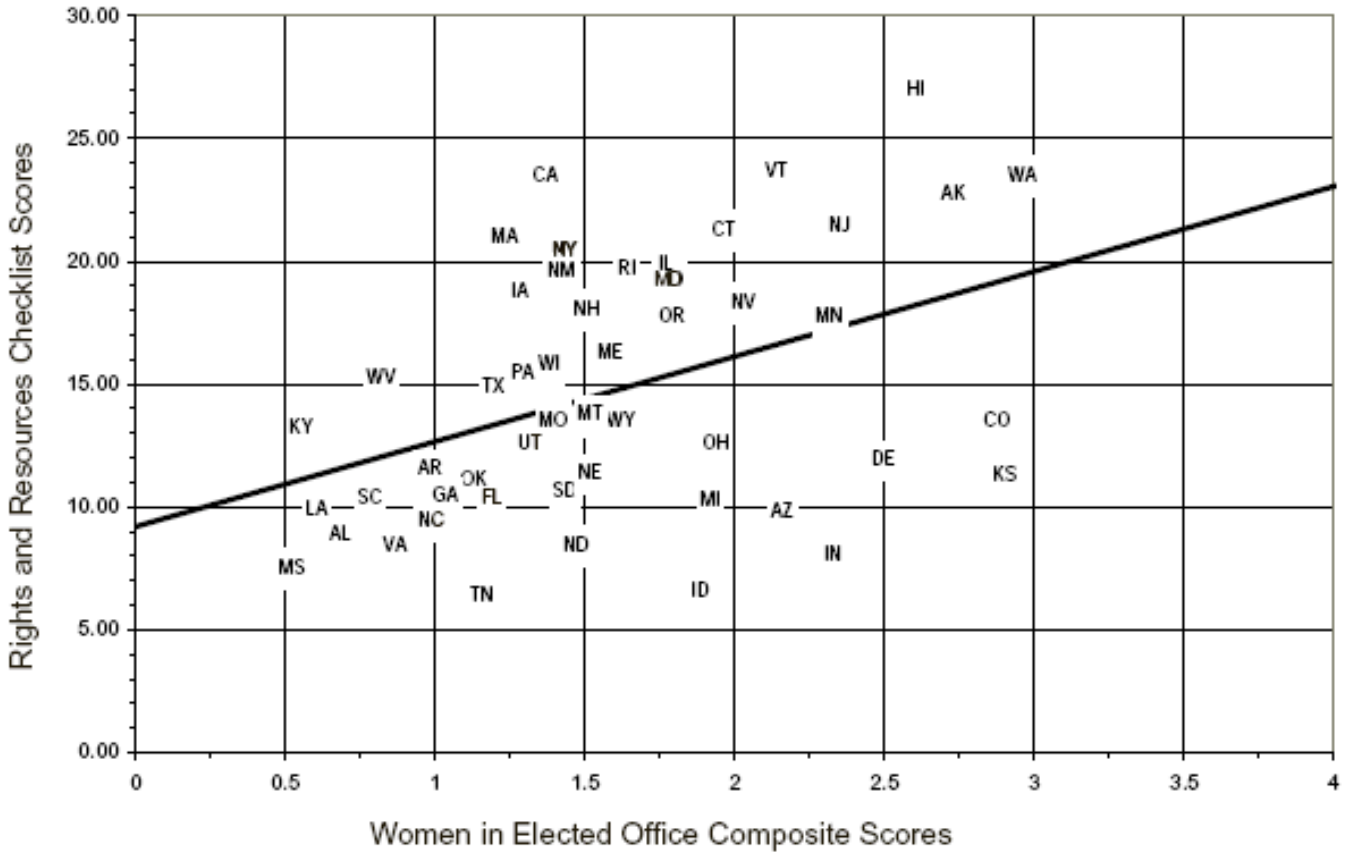


Table 1: Female Representation and Women’s Rights and Resources
 Source: Caiazza, Amy “Does Women’s Representation in Elected Office Lead to Women-Friendly Policy?” Institute for Women’s Policy Research (May 2002)
 <<<http://www.iwpr.org/pdf/i910.pdf>>>

Table 2: Vote Share and Type of Candidacy

	All	Males	Females	Interaction
Explanatory variable				
Incumbent	0.40* (32.82)	0.39* (31.75)	0.33* (9.67)	0.40* (31.25)
Open Seat	0.20* (12.04)	0.22* (12.05)	0.12* (2.84)	0.22* (11.86)
Gender				0.04 (1.74)
Gender-Incumbency				-0.06 (-1.88)
Gender -Open-Seat				-0.10* (-2.41)
R^2	0.58	0.60	0.46	0.58
Root MSE	0.15	0.15	0.17	0.15
Number of observations	795	680	115	795

Table 2 Notes: T-stats produced with robust standard errors in parentheses. Significantly different than zero at 90% (*) confidence.

Table 3: Vote Share and Campaign Spending

	All	Males	Females	Interaction
Explanatory variable				
Net Disbursements	4.34e-08* (3.87)	4.54e-08* (3.76)	3.20e-08 (1.05)	4.54e-08* (3.79)
Gender				-0.01 (-0.33)
Gender-Disbursements Interaction				1.34e-08 (-0.39)
R^2	0.02	0.02	0.01	0.02
Root MSE	0.22	0.22	0.21	0.22
Number of observations	795	680	115	795

Table 3 Notes: T-stats produced with robust standard errors in parentheses. Significantly different than zero at 90% (*) confidence.

Table 4: Vote Share and Political Party

	All	Males	Females	Interaction
Explanatory variable				
Political Party	0.02 (1.39)	0.01 (0.70)	0.10* (2.37)	0.01 (0.71)
Gender				-0.07 (-1.85)
Gender Political Party Interaction				0.09 (1.80)
R^2	0.00	0.00	0.05	0.00
Root MSE	0.24	0.24	0.22	0.24
Number of observations	795	680	115	795

Table 4 Notes: T-stats produced with robust standard errors in parentheses. Significantly different than zero at 90% (*) confidence.

Table 5: Female Professionals/Total Professionals and Political Party

	All
Explanatory variable	
Female Professionals/Total Professionals	1.41* (3.77)
R^2	0.01
Root MSE	0.50
Number of observations	1226

Table 5 Notes: T-stats produced with robust standard errors in parentheses. Significantly different than zero at 90% (*) confidence. Democrat =1; Republican =0

Table 6: Gender and Spending

	All
Explanatory variable	
Gender	229,468.5* (3.09)
R^2	0.01
Root MSE	7.1e+05
Number of observations	906

Table 6 Notes: T-stats produced with robust standard errors in parentheses. Significantly different than zero at 95% (*) confidence. Female =1; Male=0

Table 7: Gender and Receipt

	All
Explanatory variable	
Gender	234,881.3* (3.16)
R^2	0.01
Root MSE	7.1e+05
Number of observations	906

Table 7 Notes: T-stats produced with robust standard errors in parentheses. Significantly different than zero at 90% (*) confidence. Female =1; Male=0

Table 8: Gender and Incumbency

	All
Explanatory variable	
Gender	0.12* (2.63)
R^2	0.01
Root MSE	0.46
Number of observations	1226

Table 8 Notes: T-stats produced with robust standard errors in parentheses. Significantly different than zero at 90% (*) confidence. Female =1; Male=0

Table 9: Vote Share and Female Professionals in District

	All	Males	Females	Interaction
Explanatory variable				
Female Professionals/Total Professionals	0.72* (7.13)	0.94* (7.47)	0.36* (2.10)	0.94* (7.51)
Gender				0.11 (1.90)
Interaction of Gender and Female Professionals/Total Professionals				-0.58* (-2.69)
R^2	0.06	0.08	0.04	0.07
Root MSE	0.23	0.23	0.22	0.23
Number of observations	795	680	115	795

Table 9 Notes: T-stats produced with robust standard errors in parentheses. Significantly different than zero at 90% (*) confidence.

Table 10: Vote Share and Female Professionals/Total Professionals

	All	Males	Females	Interaction
Explanatory variable				
Female Professionals/Total Professionals	0.16 (0.72)	0.19 (0.77)	-0.05 (-0.09)	0.19 (0.78)
Gender				0.11 (0.34)
Interaction of Gender and Female Professionals/Total Professionals				-0.24 (-0.38)
R^2	0.0007	0.0009	0.0001	0.001
Root MSE	0.24	0.24	0.23	0.24
Number of observations	795	680	115	795

Table 10 Notes: T-stats produced with robust standard errors in parentheses. Significantly different than zero at 90% (*) confidence.

Table 11: Multivariate Analysis

Explanatory variable	Dependent variable: Vote Share in 2000 House of Reps Election
Gender	0.78* (2.40)
Incumbency	0.36* (27.81)
Open Seat	0.16* (8.11)
Political Party	0.01 (0.98)
Net Disbursements	-4.20e-09 (-0.55)
Female MPR/Total District MPR	0.91* (4.60)
Female MPR in District Population	1.00* (11.30)
Females in District Population	0.06 (0.18)
Gender-Incumbency Interaction	-0.05 (-1.53)
Gender-Open-Seat Interaction	-0.08 (-1.90)
Gender-Party Interaction	0.09* (2.90)
Gender-Disbursements Interaction	3.07e-08 (1.39)
Gender- Female MPR/Total District MPR Interaction	0.10 (0.21)
Gender- Female MPR in District Population Interaction	-0.03 (-1.59)
Gender- Females in District Population Interaction	-1.75* (-2.04)

Table 11 Notes: T-stats produced with robust standard errors in parentheses. Significantly different than zero at 90% (*) confidence.

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