

THE "GENDER GAP" IN VOTER ATTITUDES AND BEHAVIOR: SOME ADVERTISING IMPLICATIONS



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ABSTRACT

A study is carried out to examine the male/female differences in voting behavior, intention and beliefs. Hypotheses are generated from a review of the literature covering three areas: sex roles, innate differences and political participation. The results of the study are consistent with the more recent literature which suggests that the female is just as involved, interested and concerned about politics as the male is. Both females and males evaluate candidates primarily on the basis of personality and issues. The male, however, is more likely to act as an opinion leader. Implications for message strategies in political advertisements are made.

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PURPOSE OF STUDY

The purpose of this study is to examine the male/female differences in voting behavior, intentions and beliefs. In the course of the paper, we will review some of the major research studies carried out in this and related areas. We will test two research issues suggested from prior research to determine whether the old stereotypes of female voters holds true for a study carried out in 1980. We will then discuss the implications of the results of these tests for the development of messages in political advertisements. Although several related concepts in consumer behavior have been applied to politics (24, 25, 39, 53, 54, 55, 61, 65, 68), there is very little research in the literature to date on the topic of male and female differences in political marketing. According to Lipset, "the art of voting can well be used as a paradigm for many other decisions." He goes on to say "the decisions that a modern Western man makes every four years in the political arena are similar to those he makes every day as a consumer of goods and services" (43:1124).

LITERATURE REVIEW

Sex Roles

The increasing number of women today becoming involved in political activities and holding elective office is evidence of the changes in women's roles in politics which began in the 1960s. Role changes began with increased political activity in the 1980's Civil Rights Movement. In the late 1960s and early 1970s feminist organizations were formed to combat sex discrimination; expand the social, economic and political role of women; and support favorable legislation. In addition, there was an increase in the number of women voters. There has also been a change in the rise of the percentage of women delegates to the national conventions.

Studies carried out over the past 10 years have generally supported the shift in the role of women in politics. Joesting and Joesting (36) found a sex difference of greater liberalism of women's attitude toward their own roles. Kelly and Boudlier (37) concluded from their findings that female involvement in politics is not necessarily derived from cross-sex-role preferences. Their results suggest that in terms of political socialization, the father's behavior and achievements are not as critical for a daughter as they are for a son. The importance to the daughter

must be filtered through the effect the father's behavior has on the mother and the sex-role ideology held by the family.

Elias (21) suggests that sexual patterns may be affected in coming years by economic factors. The greater affluence of women should allow them more freedom in terminating unhappy marriages, and should help adolescents set up independent homes where experimentation can occur. The women's movement should encourage both men and women toward a broader spectrum of sexual expression, as traditional roles and expectations are challenged.

Although studies carried out in the late 1970s and early 1980s generally reveal a shift towards the acceptance of the women's role in political life, there is still some hesitation to accept the woman in this role. Abramowitz and Abramowitz (1) found in results of a study carried out on students that different sex role prescriptions still pervade this culture and have taken their psychological toll. In a study carried out by Hedlund *et al.* (31), there generally was no difference in terms of voting preference with regard to the sex of the candidate. However, respondents were less likely to indicate a predisposition toward a female candidate with children if the position was for the judiciary rather than for the school board. Gitteel and Shtoh (27) found that women who have been denied direct participation in the political life of the city have historically used the voluntary associations as a channel for their interests and energies. There was some sex role bias found in a study carried out by Sigelman and Sigelman (69). They gave descriptions of candidates to 1,158 voters in a simulated mayoral election. The hypothesis that similarity breeds attraction received strong support in the form of pro-female bias against women and pro-white male bias among white males.

Merritt (50) explored the relationship between political ambition and sex among local officeholders, and found no sex-related differences. Based on interviews with 51 female and 51 male municipal legislators, a discriminant analysis was carried out which revealed two dimensions: characteristics the person brings to office; and the behavior of the elected official in office. In a study which looked at the Equal Rights Amendment, it is suggested that masculine males perceive the ERA as a threat to sex-role identity, whereas masculine females perceive the ERA as an amendment that will bring about legislation beneficial to their particular personal style (26). Sapira (62) used undergraduate students in two political science courses and found results which indicate that students had lower expectations for a woman's success than for a man's success. She suggests that gender provides a cue for evaluating candidates

for office, especially under conditions of low information.

Innate Differences

There has been a fair amount of research on whether sex-related differences are innate. A good deal of research within this area has been done on sex-related cognitive differences in the area of personality in psychology and in education. In a book on this topic, Sherman (67) has concluded that females have greater verbal abilities than men. There has been a lot of support for this conclusion, especially for adolescent boys and girls based on their genetic make-up (35, 45). Other studies have concluded that the influence of the environment is the predominant cause behind these differences (23, 70).

Some studies have suggested that boys have greater mathematical visual-spatial ability, and problem-solving skills (2, 45, 46, 47, 52). Priest and Ihunseker (56) used Maier's Horse Trading Problem as an experimental setting to arrive at the conclusion that the females' performance in problem-solving improved if they were given more time and detailed instructions. The implication drawn here is that if males have greater analytic ability, they should be better able to deal with a set of complicated issues.

Females have been found to be more easily persuaded (34), more acquiescent (15), and more field dependent (77) than males. There is evidence to suggest that women are less interested in impersonal stimuli (such as mass media), and more oriented towards persons they know. Women were also found to be less tolerant of partisan conflict (20, 71). This research could lead one to the conclusion that females are more person oriented, and therefore more likely to be concerned about the characteristics of the candidate. In fact, Campbell found women to be more candidate oriented and less issue oriented than men (12). However, more recent studies have indicated otherwise.

An investigation into this area by Dearden (19) provided results which lend only mild support for the hypothesis that sex-related differences in political behavior are in part derived from gender-specific innate behavioral predispositions rather than from differential learning experiences. More recent literature from the 1980s concludes that political scientists have portrayed women in a stereotypical, biased manner (22). Evans draws three major conclusions which she says have brought about the effect of a male bias in political science. These include the statement that there are grossly insulting comments about women; there are assumptions which lead to a false assessment of women's political nature and potential; and there has been an exclusion of women and issues relevant to women from serious consideration. In her

estimation, the effect of these biases is the contamination of the conduct, findings and conclusions from political science research.

A very recent study by Goertzel (28) used survey data from a New Jersey sample in 1982 and national data from the University of Michigan surveys. The study highlights two major reasons for the so-called "gender gap": Women tend to be less militaristic than men, regardless of their economic situation; and women in lower income brackets tend to be more strongly opposed to President Reagan's economic policies than men in the same economic categories, or voters of either sex in better economic circumstances.

In a study of the 1968 national election, Dabbs (16) concluded from his results that males and females differ in the kind of winner they prefer, with males becoming more favorable toward a candidate who won by a narrow margin, and females more favorable toward a candidate who won by a large margin. Darcy and Schramm (17) examined the electorate's reaction to women Congressional candidates, using election returns and survey data. They found that when party and incumbency are controlled, candidate sex alone has little effect on the election outcome. Using survey data from 1952-1976, Shabad and Anderson (64) determined there is no evidence for consistent sex differences in orientation to candidates versus the issues. This contradicts the widely accepted generalization that women tend to personalize politics and politicians.

Political Participation

Another stream of research has centered in on the conservatism of judgment of males and females, especially as it influences voting behavior. Wallach and Kogan (73) have concluded that there are contradictory findings concerning this topic. Several researchers have come up with the results that suggest women are more conservative than men (9, 10, 72). Other studies have shown women to be less conservative (66). Wallach and Kogan (73) suggested that the level of interest and/or ability on the part of the respondents could account for the contradictory findings.

Some political scientists and sociologists have supported the finding that women are more conservative when it comes to voting behavior. Women are less inclined than men to rebel (32, 51). Sears (63) found women to be much more influenced by their family. Boys tend to receive political information from television and movies, while girls receive advice from parents (7, 30, 40). As a rule, parents will exert a more conservative influence on the child, simply because they are older, and more likely to be set in their ways.

The study of actual voting behavior of men and

women has resulted in findings that suggest men have a higher turnout in elections than women (11). One explanation behind this is the impact of occupation. Because men are engaged in more professional jobs, they may be forced to use their intellectual powers and therefore to develop skill in understanding complex social and political mechanisms. Within this framework, the housewife may be at a disadvantage.

Another explanation has been offered by Gouldner (29). He suggests that more leisure time brings about greater political participation. He reasons that a housewife has a more demanding job than a husband, and therefore has less time for leisure and informal discussions. A third explanation lies in the amount of social pressures put on men and women to vote. Some researchers (33, 41) suggest that there are fewer social pressures on women to vote due to the overused cliché that a woman's place is in the home. This could result in less interest on the part of women to vote, and a resultant lack of pressure to go out and actually cast a vote. However, more recent studies suggest that there has been a narrowing in sex differences in political participation.

Data from the Survey Research Center's 1952-1972 election studies found that the narrowing in sex differences in political participation is due to a particular group of women: Those employed outside the home (4). Welch and Karnig (75) found that the less desirable and less important the office, the more likely women will hold it. Welch (74) tested two plausible explanations as to why women are less politically involved: The family responsibilities that keep women home and out of the labor force (called the "situational" explanation); and overrepresentation of women in demographic groups that have low participation levels (called the "structured" explanation). When the "situational" and "structured" variables are controlled, there are no systematic differences in the levels of male-female participation.

Using 1972, 1974, and 1978 National Opinion Research Center General Social Surveys, Welch and Sigelman (76) show a modest increase in the support for female political activity, especially from young people. These results are supported by Rapoport (56), who suggests that sex differences are shown to be largely a generational phenomenon that is greater among older subjects. He found that it also declines at higher levels of political knowledge and interest. He concluded that younger females have at least partly overcome the socialized reticence of previous generations in expressing their attitudes.

Political Advertising

The implication of gender differences in voting

behavior, intentions and beliefs to political advertising and communications is very important. Two summaries of vast amounts of research related to sexual stereotypes have concluded that although there may be psychological differences, these tend to have little or no effect on individuals' responses to persuasive communications (44, 45). However, Markin (48) concluded that females are more persuadable than males. In a study using survey data from 1,334 Michigan secondary school students, there was a greater reluctance on the part of adolescent females to express attitudes and to try to persuade others how to vote (57). The author argues that this behavior is the result of the socialization process in this society.

Males have been found to be more likely to attempt to persuade another how to vote (74). Along this line of thinking, studies have repeatedly found that females are more likely to give "don't know" responses than are males, or less likely in effect to express an opinion (14, 33).

Although the male stereotype suggests that men are less responsive than women to social cues (43), there is insufficient evidence to predict how they will react to social approval and disapproval appeals. But given the greater verbal ability of girls and math ability of boys (45), males should respond better to numerical messages, while females should respond better to verbal messages.

Bem (6) has proposed a Gender Schema Theory as an explanation of how one's gender affects the individual's cognitive structure. As a result, different genders process ads differently due to a differential set of responses to the ads (3). In a study by Markus *et al.* (49), masculine schematics were found to recall masculine terms more readily, while feminine schematics recalled feminine terms more readily.

Some studies have been carried out which have keyed in on the gender differences in actual usage of various forms of media during the course of an election. In a study carried out by Blume and Lyons (8) on a local election, a slightly greater percentage of the 165 males were found to regularly expose themselves to news offerings of the major mass media (including newspapers, television, and radio). However, a slightly greater percentage of the 216 females indicated that they tended to rely primarily on the major mass media (including newspapers, television, radio, news magazines, and trade and union journals) as sources of information about the election. A greater percentage of females also considered newspaper endorsements. Of those respondents who considered newspaper endorsements, a slightly greater percentage of females indicated that they considered them most of the time. However, a slightly greater percentage of

males indicated that they were generally more knowledgeable about endorsements.

Leroy and Lyle (12) concluded that males watched the Watergate hearings more than females. The information sources from which opinion leaders and non leaders heard about candidates in a race for the U.S. Senate were examined (5). They found that male were significantly more likely to be political opinion leaders than females. In a study by Rosenbaum *et al.* (60), the attitudes of 48 undergraduate psychology students were measured on the U.S. involvement in Vietnam prior to and after exposure to a speech on war. No sex differences were found in the degree of selective exposure to the message delivered in the speech.

In a more recent study by Dayhoff (18), simulated newspaper articles describing several candidates were presented to 629 undergraduates who rated the candidates on evaluation and gender-stereotypic measures. A significant 3-way evaluation interaction indicated that linguistic sexism caused women to be negatively evaluated when seeking a "masculine" or "neutral" office. A significant 2-way stereotypic interaction suggested that linguistic sexism made more salient the gender appropriateness of the offices. Candidates running for the "masculine" offices were perceived as more "masculine" and candidates running for the "feminine" offices a more feminine.

It is evident that the sex differences outlined in the literature review are sometimes contradictory in findings. This is especially true when one compares the results of studies carried out prior to and after the mid-1970s.

HYPOTHESES

H₁: Women vote for more conservative candidates, while men vote for more liberal candidates.

This hypothesis underlies the basic notion that males and females vote for different candidates because of their candidate's political ideology. It is believed that the voter is exhibiting his/her own relative conservatism in the act of voting. Although results have been mixed on this topic in the social psychology literature (73), there are studies in the political science and sociology literature that support the idea that women are more conservative than men (32, 51).

A related factor that ties into the initial hypothesis centers on the fact that girls tend to receive more information on politics from their parents as opposed to other sources (7, 30, 40). Due to the fact that conservatism tends to grow in a person as they go:

older, the advice given by parents would naturally be more on the conservative side.

However, there is evidence in the literature which suggests that much of the research carried out in political science may be biased and misrepresenting women in a stereotypical manner (22). With the general increase in support of female political activity (78), especially from young people, it is quite possible that the female voter in 1980 is not as conservative as she is depicted in earlier research. In fact, Rapoport (58) suggests that gender differences may largely be found primarily among older subjects.

H₂: Women are more candidate driven whereas men are more issue driven.

There has been a lot of research done to document the fact that females have different cognitive abilities than males. Females are believed to have better verbal skills than males (35, 45, 67), while males are believed to have better problem-solving (or mathematical skills) (2, 45, 52, 56). Along with these cognitive differences lies the ability to deal with the complex social, economic and political milieu that a voter must sift through in order to understand the interrelationships between the issues in a campaign. With better problem-solving abilities, a male should be better able to deal with the issues of a campaign.

For the female, the difficulty in dealing with the issues of a campaign as a basis of her decision could lead her to simplify this information processing task and revert to an affective-based process which would cause her to center in on the personality of the candidate. Literature in social psychology supports the idea that the female is in fact more easily persuaded (34) and more acquiescent (15). These findings would reinforce the impact that a candidate is likely to have on a female's vote through the use of a more personalized campaign. Although there is no research to document the concerted effort on the part of candidates to take a more personalized approach in a campaign, it is evident from observing the campaign strategies of many candidates that there are some candidates who choose a more personal campaign over an issues-oriented campaign.

However, there is evidence from a study by Shabad and Anderson (64) that there was no evidence for consistent sex differences in orientation to issues versus candidates. This is in direct contradiction to the generalization that women tend to personalize politics. In fact, Joesting and Joesting (36) found females to have more liberal attitudes toward their own sex roles.

STUDY DESCRIPTION

The study was carried out in Champaign-Urbana,

Illinois. It was conducted during the March 1980 presidential primary election.

Sample

A PPS (probabilities proportionate to size) design was chosen to develop the sample. The desired sample size was determined by the number of Democratic and Republican candidates to be surveyed. Three Republican candidates: John Anderson, George Bush and Ronald Reagan, and two Democratic candidates: Jimmy Carter and Edward Kennedy, were chosen as the subjects of analysis. (John Anderson was voted for by "cross-over" Democrats. He will also serve as a third Democratic candidate in the analysis.) Therefore, the final desired sample size for the Republicans was 450 and 300 for the Democrats (or 150 respondents for each candidate).

Instrument

In order to survey voters intending to vote in either the Democratic or the Republican Party, it was necessary to develop two separate questionnaires. This was due to the fact that voting criteria varied according to the party as well as to the individual candidates in each party. Both questionnaires were structured identically. The questionnaires covered three major areas pertaining to this study.

The first area covered seven issue and non-issue related belief dimensions. Several sources were used to generate the items for each belief dimension. First of all, a survey of the literature was done on major news magazines, major and local newspapers, campaign literature and television news and analysis programs over a five-month period beginning in November 1979. Secondly, qualitative research was done on fifty respondents who intended on voting in the primary. For each of the five candidates, ten respondents were identified on the basis of their intention to vote for that candidate. This was done six weeks before the election in order to get as accurate an indication of the respondent's intention as possible. These interviews were conducted over the telephone to residents living in Champaign and Urbana.

Each of the seven belief dimensions is described below. Due to the large number of statements used to measure each belief dimension, only a sample will be presented here. (It should be pointed out that the wording of the belief statements varied slightly between the two parties.) Four of the belief dimensions covered the issue domain, and three covered the non-issue domain.

Issue Beliefs

1. Issues and Policies: Issues and policies included a series of statements covering four areas:

economy, leadership, foreign policy, and social issues. Each statement (e.g., I believe my candidate will cut taxes for individuals, etc.) was measured on a binary scale (agree/disagree). Total number of statements: Democrat (22); Republican (24).

2. Current Events: Current events (domestic and international) were measured on a binary scale (yes/no) with respect to the belief that any of the following situations (e.g., If we get to a point where we are on the brink of war, etc.) would influence a voter to switch to another candidate. Total number of statements: Democrat (9); Republican (8).
3. Personal Events: Events about the candidate were measured on a binary scale (yes/no) with respect to the belief that any of the following hypothetical situations (e.g., Had lied to the press, etc.) would influence the voter to switch to another candidate if they knew they had occurred. Total number of statements: Democrat (11); Republican (9).
4. Nonspecific Issues: Nonspecific issues about the candidate included a series of statements (e.g., I am voting for my candidate because of his performance in one of the prior debates, etc.) about the specifics of that election which might trigger the curiosity of the voter. Each issue was measured on a binary scale (yes/no). Total number of statements: Democrat (8); Republican (9).

Non-Issue Beliefs

1. Personal Feelings: Feelings toward the candidate were measured on a binary scale (yes/no) by listing a series of feelings (e.g., patriotic, hopeful, excited, responsible, etc.). An indication was made as to whether these feelings were elicited by voting for their candidate. Total number of statements: Democrat (9); Republican (9).
2. Candidate Characteristics: Candidate characteristics included several personality traits (e.g., articulate, compassionate, charismatic, stable, etc.) which were measured on a binary scale (yes/no). A statement about the belief that a candidate possesses each of the characteristics was surveyed. Total number of statements: Democrat (17); Republican (15).
3. Social Groups: Social groups included a listing of groups of people who are likely to be supportive of the candidates. A binary scale (most likely/least likely) was used to measure whether the respondent thought that group

was likely to vote for his candidate. (The groups mentioned included: conservatives, independents, veterans, students, and environmentalists, among others). Total number of statements: Democrat (14); Republican (14).

The second area covered the voting intentions and behavior of the respondents. Finally, the third area covered the background of the respondent, which included a series of questions on party affiliation, standard demographics and other general questions. Each questionnaire was pretested to detect either conceptual or operational flaws. Approximately ten respondents were chosen at random in a local shopping mall and asked to participate in the pretest. The respondents represented a cross-section of the electorate.

Data Collection

Six stages were needed to carry out the data collection. The first stage involved the identification of phone numbers for the approximately 2,000 names. Approximately 66 percent of the names were identified in the phone directory. The second stage involved a telephone screening process during which voters were classified according to their intention to vote in the primary. Only those respondents indicating an intention to vote in the primary were asked to participate. The screening process was done three weeks prior to the primary in order to maximize the number of respondents who had formed an intention to vote for a specific candidate.

The third stage involved the mailing of a postcard nine days before the primary to alert the respondent to the fact that they would be receiving their questionnaire in the next few days. The fourth stage covered the execution of the mail survey. The questionnaires were mailed six days before the primary. The fifth stage involved the mailing of a second postcard four days before the election to remind the respondents to return their questionnaires before they voted. Only those questionnaires that were postmarked before the primary were used.

The final stage involved the determination of the respondents' actual voting behavior. In order not to contaminate the data, a different interviewer telephoned those respondents who returned their questionnaire(s) within two weeks after the primary. The interviewer said she was studying the phenomenon of "crossover voting" for one of her classes at the university, and was therefore interested in how the respondent voted.

Analysis

The first hypothesis was tested by cross-tabulating voter ideology with the sex of the respondent across

TABLE 1
RESPONSE RATE ON MAIL SURVEY

Good Returns	655	(78%)
Post Office Returns	6	(1%)
Not Usable	26	(3%)
Total Responses	687	(82%)

107-8454

four levels: self-perception, beliefs, intentions, and behavior. Self-perceptions were measured by noting the percentage of females and males who classified themselves as either a conservative, moderate, or liberal. This was determined by the following question: *Do you consider yourself (circle one only): A. Conservative; B. Moderate; C. Liberal?*

Another test of the hypothesis was carried out on a measure of beliefs. In order to do this, two of the seven belief dimensions were broken down into those statements which were clearly either liberal or conservative in tone. The two dimensions were issues and policies and social groups. These were chosen due to the relatively clear-cut nature of these beliefs statements along an ideological dimension. This was done in each party. Four indices were developed, a conservative and liberal index in each party.

Each index was developed by first screening out those individual statements within each belief dimension that were significant at the $p < .05$ level in a series of pairwise T-tests carried out between each pair of candidates within each party. The significant belief statements for each dimension were then added up and divided by the number of significant statements. (Individual belief statements were coded either 0 or 1, reflecting either agreement or disagreement with the statement. Therefore, the index value will range between 0 and 1.) This yielded an average score for each respondent on each of the four indices. The liberal and conservative indices within each party were then correlated to test for orthogonality.

Intentions were measured on a nominal scale with the following question: *Whom do you plan on voting for in the Illinois Primary on March 18?* A list of candidates running in the primary was provided for in the survey. The respondent then indicated his choice by placing a check mark next to the name of one of the candidates listed. Finally, behavior was measured by a telephone interview conducted after the election. The respondent was asked: *Whom did you vote for in the Illinois Primary on March 18?* The respondent replied with the name of the candidate he/she chose.

The second hypothesis was tested by first doing a T-test on a statement which measured the importance the respondent placed on the personality of the candidate. Respondents were asked to indicate whether or not they were voting for their candidate strictly due to his personality. Specifically, the question in the Republican survey was phrased: *"I am voting for my candidate because of his charming personality."* In the Democratic survey the question was phrased: *"I am voting for my candidate because of his magnetic personality."* Respondents were asked to indicate with a "yes" or "no" response. The wording of the questions was based on verbatim responses obtained from the qualitative research carried out.

The next test of this hypothesis was carried out by doing a T-test on those beliefs which are clearly candidate and issue oriented. (Only those beliefs significant at the $p < .05$ level were used.) The beliefs falling into the issue domain were the issues and policies and nonspecific issues dimensions. The beliefs representing the candidate domain were the candidate characteristics dimension. A univariate F-test was performed on those beliefs. A MANOVA test (Hotelling T^2) was also carried out on the belief statements in each party. In addition, a T-test was carried out on each of the three belief dimensions by taking those beliefs significant at the $p < .05$ level, and then creating an index by dividing by the number of significant beliefs in each of the dimensions.

Results

A brief profile will be given of the male and female respondents in the sample. Generally speaking, in both parties, the females are consistently more interested, concerned over the outcome of the election, and believe their vote is more effective than their male counterparts. The difference, however, is very slight.

In terms of their demographic profile, the average male respondent is fifty-one years old; with a college degree (over half have a masters or doctorate); over half have either a professional, technical, or managerial position, and cover a wide range of occupations; and over 90 percent stated that they come from either the middle or upper middle class. The average female respondent is forty-nine years old; with some college (over half have a college degree); covering a wide range of occupations (including professional, technical, or managerial positions); and over 90 percent stated that they belong to either the middle or upper middle class.

H_1 : Women vote for more conservative candidates while men vote for more liberal candidates.

The results in Table 2 yield a chi-square equal to

.33 in the Democratic Party, and 3.67 in the Republican Party. These results are not significant at the .05 level. One would therefore have to conclude that there is not any systematic relationship between voter ideology and sex of the respondent on a self-perception dimension.

TABLE 2
VOTER SELF-PERCEPTIONS

Democrats	Male	Female
Conservative	7 (8.4%)	6 (6.3%)
Moderate	49 (59%)	57 (59.4%)
Liberal	27 (32.6%)	33 (34.3%)
	n = 83 (100%)	n = 96 (100%)
Chi-Square = .35 Not significant at .05 level		
Republicans	Male	Female
Conservative	13 (38.4%)	33 (28.4%)
Moderate	58 (51.8%)	64 (55.2%)
Liberal	11 (9.8%)	19 (16.4%)
	n = 112 (100%)	n = 116 (100%)
Chi-Square = 3.67 Not significant at .05 level		

A measure of ideology on a self-perception dimension may not actually reflect the voting behavior of the respondents. Some voters may like to think of themselves as liberals, but actually vote for a conservative candidate if he happens to exhibit a personality trait that is very important to the voter. For example, in the 1980 Presidential Election, the voters who claimed to be liberals and voted for Reagan did so because of his strong leadership qualities. On the other hand, there were voters who considered themselves to be conservatives who voted for Carter in 1976 because he represented a change in the present administration. We must move a step closer to the behavior before we can begin to get a good measure of the test of the hypothesis. This leads one to a measure of the intentions of the voters.

The next test of the hypothesis was carried out by first putting the candidates on a scale of ideology, with either polar being conservative and liberal. The following scale was derived for the study:

Conservative	Liberal
Ronald Reagan	George Bush	John Anderson
		Jimmy Carter
		Edward Kennedy

The scale was developed by doing a content analysis of the campaign platforms of each candidate. As one might expect, the two Republican candidates are found on the conservative end of the continuum, while the two Democratic candidates are found on the liberal end of the continuum. Anderson, who ran as an Independent, is naturally positioned in the center of the continuum.

A review of Table 3 yields chi-squares equal to .45 in the Democratic Party and .65 in the Republican Party. Neither of these tests are significant at the .05 level. We would therefore have to draw the conclusion that there is not any systematic relationship between the voting intentions and sex of the respondent. These results are consistent with the self-perception ratings, which also revealed a similar pattern of responses.

A more severe test of the hypothesis was carried out on a measure of the respondents' actual behavior. It is clear that there can be intention-behavior discrepancies in voting (88). Therefore, it is possible that the respondents' behavior may be different from their stated intentions.

TABLE 3
VOTER INTENTIONS

Democrate	Male	Female
Carter	57 (65.5%)	65 (65%)
Kennedy	20 (23%)	26 (26%)
Anderson	10 (11.5%)	9 (9%)
	n = 87 (100%)	n = 100 (100%)
Chi-Square = .15 Not significant at .05 level		
Republicans	Male	Female
Reagan	41 (35.3%)	36 (30.7%)
Bush	25 (21.5%)	29 (24.5%)
Anderson	50 (43%)	52 (44.5%)
	n = 116 (100%)	n = 117 (100%)
Chi-Square = .65 Not significant at .05 level		

A review of Table 4 reveals a pattern similar to the results already mentioned. In the Democratic Party, the chi-square is equal to .75, while in the Republican Party, the chi-square is equal to .52. Neither of these tests are significant at the .05 level. Again, one would have to conclude that based on these results, there is not any systematic relationship between voting behavior and sex of the respondent.

TABLE 4
VOTER BEHAVIOR

Democrats	Male	Female
Carter	45 (45.9%)	58 (58%)
Kennedy	20 (22%)	22 (21%)
Anderson	26 (28.6%)	25 (23.8%)
	n = 91 (100%)	n = 103 (100%)
Chi-Square = .75	Not Significant at .05 level	
Republicans	Male	Female
Reagan	45 (38.8%)	42 (34.7%)
Sush	24 (20.7%)	24 (20.3%)
Anderson	47 (40.5%)	53 (44.9%)
	n = 116 (100%)	n = 117 (100%)
Chi-Square = .52	Not Significant at .05 level	

The last test of the first hypothesis covered the voter beliefs. In the Democratic Party, sixteen belief statements were used to create the liberal index, and nine belief statements were used to create the conservative index. In the Republican Party, eight belief statements were used to create the liberal index, and eighteen belief statements were used to create the conservative index. This is due to the fact that there were more liberal beliefs listed in the Democratic survey, and more conservative beliefs listed in the Republican survey.

A review of Table 5 indicates that there are not any significant differences between the males and females on either the conservative or liberal indices in the Democratic or Republican Party. In fact, if we look at the means, we find the means for both groups to be either identical or within .01 of one another.

We then tested for orthogonality by correlating the liberal and conservative index in each party. In the Democratic Party, the intercorrelation was equal to $-.05$. In the Republican Party, the intercorrelation between the two indices was equal to $-.30$. These rather low correlations support the fact that the dimensions are independent of one another.

The several tests carried out to test the first hypothesis do not confirm it. However, the results are not strong enough to clearly reject it. One, however, would have to seriously question much of the relevance of the literature on male and female differences carried out prior to the mid-1970s. It seems that the female voter of the 1980s does not characterize the more conservative stereotyped female voter depicted in the earlier literature. The implication of these results to the political advertiser indicates that advertisements should definitely not be based on a dimension of ideology as a means of segmenting male and female voters.

H₂: Women are more candidate driven whereas men are more issue driven.

This hypothesis was tested initially by doing a T-test on the belief statement which indicated the importance males and females placed on the personality of the candidate. The results in Table 6 provide inconsistent results. There is a significant difference between males and females in the Republican Party, with the females attaching more importance to the personality of the candidate, as the literature would lead one to believe. However, there is not a significant difference between males and females in the Democratic Party. This could be due to the fact that there is a different choice of candidates, or due to the wording of the questions on the survey. Or it could be due to the fact that female voters have a different choice criteria in the two parties. The advertising implication to a Republican candidate is to stress his personality to the female voter.

TABLE 5
VOTER BELIEFS

Beliefs	Democrats		Republicans	
	Means		Means	
	Male (n=91)	Female (n=103)	Male (n=159)	Female (n=161)
Conservative Belief Index*	.69	.68	.58	.58
Liberal Belief Index*	.49	.49	.59	.60

*Not significant at .05 level

TABLE 6

"CANDIDATE-ORIENTATION" SELF
DESCRIPTION

Republicans		Means
Male (n = 116)		.11*
Female (n = 118)		.23*
Democrats		
Male (n = 91)		.14
Female (n = 105)		.14

*Significant at .05 level

To gain a stronger insight into this hypothesis, a set of univariate F-tests were performed on those beliefs which are clearly candidate oriented and on those which are clearly issue oriented. A multivariate test of significance was then carried out on all of the

variables in each party. A review of Table 7 clearly highlights differences between males and females. In fact, there were significant differences across selected issues and candidate characteristics. The multivariate tests of significance were equal to .00 in the Republican Party and .03 in the Democratic Party. The most significant differences in the Republican Party occurred on the issue: My spouse influenced me. The next most significant difference occurred on the issue: Give us a strong, decisive government. The next most significant variable was a candidate characteristic: Experienced. In the Democratic Party, the most important significant variable was a candidate characteristic: Be able to deal with Congress. These results support the research by Welch (74) and Anderson and Garrison (5), who reported that males are more likely to attempt to persuade others. The fact that Republican females place more reliance on media coverage supports the results of Blume and Lyons (8). These results also suggest that messages which bring across the candidate's experience and decisiveness will be very effective advertising appeals.

Females placed more importance on each of these

TABLE 7

ISSUE/CANDIDATE BELIEFS STATEMENTS

	Democrats		Univariate Test	
	Males	Females	df = (1,151)	
			F-Ratio	Prob.
BELIEFS				
1. Be able to deal with Congress (IP)	.65	.79	6.19	.01
2. Able to get things done (CC)	.58	.71	3.21	.07
	Republicans		Univariate Test	
	Males	Females	df = (1,237)	
			F-Ratio	Prob.
BELIEFS				
1. My spouse influenced me (NI)	.04	.15	8.06	.00
2. Give us a strong, decisive government (IP)	.87	.96	6.42	.01
3. Experienced (CC)	.89	.97	6.09	.01
4. Regulate gasoline and heating oil prices (IP)	.34	.50	5.92	.01
5. Able to get things done (CC)	.86	.94	5.83	.01
6. Of his charming personality (NI)	.11	.23	5.61	.01
7. Of his media coverage (NI)	.14	.27	5.01	.02
8. Bring respect to the nation (IP)	.88	.96	4.97	.02

(Democrat) Multivariate Test of Significance

Hotelling's $T^2 = .64$ $F = 3.49$ $df = 2$ $Sig. = .05$

(Republican) Multivariate Test of Significance

Hotelling's $T^2 = .12$ $F = 3.66$ $df = 8$ $Sig. = .00$

IP: Issues and Policies

CC: Candidate Characteristics

NI: Nonspecific Issues

belief dimensions. In fact, if we look at the mean differences, the females had a higher or equivalent mean on each of the variables. This would suggest that the females are more involved in both the issues of the campaign as well as the characteristics of the candidate. However, this is somewhat misleading. If we look at the magnitude of the scale index for the Democrats on the candidate and issue dimensions for males and females in Table 8, we see that the candidate index dominates. The respective means for males and females is .84 and .88, as compared with .63 and .60 for the issues and policies dimension, and .22 and .22 on the nonspecific issues dimension. This clearly points out that both males and females are more concerned with the characteristics of the candidate, with the female being slightly more involved than the male. (The results revealed a similar pattern for the Republicans.) Based on these results, we would have to reject the second hypothesis in light of the findings that the female voter is both more candidate and issue driven than the male voter.

CONCLUSION

The importance of understanding sex differences in voting behavior can be explained by taking note of the following two factors. First of all, women now constitute the majority of voters (53%) and there has been less research on them than on males. Secondly, it is an obvious segmentation strategy for political candidates. It is very evident that many of the Democratic contenders for the 1984 presidential nomination are attempting to align themselves with the female bloc of voters.

The study reported in this paper presented a perspective to the "gender gap" which centered in on male and female differences in voting behavior. The results present a picture of male and female voting

differences which is consistent with the more recent literature in this area.

It is interesting to note that most of the studies discussed in the literature review prior to the mid-1970s reveals a profile of female voters' attitudes and behavior which is discrepant from the female in the 1980s. The female voter of the 1980s, as reported in this study, is quite different from the one depicted in earlier studies. She is more involved, interested and concerned about politics. This is clearly supported by the establishment of the ERA movement, NOW organization, and active role of the League of Women Voters in the political process. She is, in fact, concerned about a broad range of issues, including those on the economic, social and military front. This suggests that she is able to deal with the complexity of issues, which is in contradiction to earlier studies. However, she is still concerned with the candidates' characteristics, which predominately influence the voting of females. The new insight is that candidate characteristics also predominantly influence the males' voting behavior.

The implication of these results to political advertisers lies in the message strategies used in advertisements. The results of this study support the findings reported in many studies carried out in the mid-1970s and 1980s that females are active and involved political participants. Both females and males evaluate candidates on the basis of personality and issues. The results from this study suggest that the male is more likely to act as an opinion leader and attempt to persuade others. It would therefore be advisable for advertisers to target their messages to the males. However, given the strong interest in the issues of the campaign by both males and females, advertisements should be created with messages which stress the appropriate appeals to both sexes in the election.

TABLE 8
ISSUE VS. CANDIDATE INDICES/BELIEFS

	Democrats		Republicans	
	Males (n=91)	Females (n=105)	Males (n=115)	Females (n=118)
INDICES				
1. Issues and Policies Index	.63	.66	.66	.67
2. Nonspecific Issues Index	.22	.22	.28*	.35*
3. Candidates' Characteristics Index	.84**	.88**	.80	.86

*Significant at .01 level

**Significant at .05 level

setting. In fact, consistent with prior findings, females do tend to put more reliance on media coverage than males do.

The implications of these results are especially important to candidates. They should adopt a more realistic approach to the study of voting behavior, and understand that as a consumer in the political marketplace, it is important to take note of the differential need hierarchies of both males and females. Any candidate who fails to realize this will be caught by surprise, and will only have the phenomenon known as the "gender gap" to explain for it.

LIMITATIONS

Due to the fact that the study was based on a presidential primary race, one would have to be very careful not to generalize the results of this study to any general election. A primary is a unique choice setting which differs from a general election in a number of ways. First of all, voters sometimes cross over to vote against a candidate, rather than to cast a vote for a candidate. Secondly, the vote will only result in a nominee for the party, rather than in an elected official. Third of all, primary voters represent a much smaller percent of the electorate vote in a primary, and are therefore not representative of the electorate as a whole.

REFERENCES

1. Abramowitz, Stephen L., and Christine V. Abramowitz, "A Tale of Serendipity: Political Ideology, Sex Role Prescriptions, and Students' Psychological Adjustment," *Developmental Psychology*, 10 (2, 1974), pp. 249.
2. Allen, M.J. "Sex Differences in Spatial Problem-Solving Styles," *Perceptual and Motor Skills*, 39 (1974), pp. 843-48.
3. Alreck, Pamela L., Robert E. Settle, and Michael A. Belch. "Who Responds to 'Gendered' Ads, and How?," *Journal of Advertising Research*, 22 (2, 1982), pp. 25-32.
4. Anderson, Kristi. "Working Women and Political Participation," *American Journal of Political Science*, 19 (3, 1975), pp. 459-53.
5. Anderson, Peter A., and John P. Garrison. "Media Consumption and Population Characteristics of Political Opinion Leaders," *Communication Quarterly*, 36 (3, 1978), pp. 40-50.
6. Bem, Sandra Lipsitz. "Gender Schema Theory: A Cognitive Account of Sex-Typing," *Psychological Review*, 88 (4, 1981), pp. 354-64.
7. Berelson, B.R., P.F. Lazarsfeld, and W.N. McPhee. *Voting: A Study of Opinion Formation in a Presidential Election*. Chicago: University of Chicago Press, 1954.
8. Blume, Norman, and Schley Lyons. "The Monopoly Newspaper in a Local Election: *The Toledo Blade*," *Journalism Quarterly*, 45 (1968), pp. 286-92.
9. Brim, O.G., "Attitude Content-Intensity and Probability Expectations," *American Sociological Review*, 20 (1955), pp. 66-76.
10. Brim, O.G. and D.B. Hoff. "Individual and Situational

Differences in Desire for Certainty," *Journal of Abnormal Social Psychology*, 54 (1957), pp. 225-29.

11. Campbell, A., and R.L. Kahn. "The People Elect a President," *Survey Research Center Series, Publication 9*, Ann Arbor: University of Michigan, 1952.
12. Campbell, A.G., G. Gurin, and W.E. Miller. *The Voter Decides*. Evanston, IL: Row Peterson, 1953.
13. Campbell, A., P.E. Converse, W.E. Miller, and D.E. Stokes. *The American Voter*. New York: John Wiley and Sons, Inc., 1960.
14. Cantril, A., and C. Roll. *Hopes and Fears of the American People*. NY: Universe Books, 1971.
15. Cohen, A.R. *Attitude Change and Social Influence*. New York: Basic Books, 1964.
16. Dubbs, James M. "Attitudes Toward Winner and Loser After an Election," *Social Behavior and Personality*, 3 (1, 1975), pp. 45-48.
17. Darcy, R., and Sarah S. Selcramn. "When Women Run Against Men," *Public Opinion Quarterly*, 41 (1, 1977), pp. 1-12.
18. Dayhoff, Signe A. "Sexist Language and Person Perception: Evaluation of Candidates From Newspaper Articles," *Sex Roles*, 9 (4, 1983), pp. 527-39.
19. Dearden, John. "Sex-Linked Differences of Political Behavior: An Investigation of Their Possibly Innate Origins," *Social Science Information*, 13 (2, 1974), pp. 79-85.
20. Dennis, J. "Support for the Party System by the Mass Public," *American Political Science Review*, 60 (1966), pp. 600-15.
21. Elias, Veronica. "A Cautionary Note on Sex Studies," *The Humanist*, 36 (2, 1976), pp. 23-25.
22. Evans, Judith. "Attitudes to Women in American Political Science," *Government and Opposition*, 15 (1980), pp. 101-14.
23. Fennema, E. and J. Sherman. "Sex-Related Differences in Mathematics Achievement, Spatial Visualization and Affective Factors," *American Educational Research Journal*, 14 (1977), pp. 51-71.
24. Fishbein, Martin and Icek Ajzen. "Predicting and Understanding Voting in American Elections: Effects of External Variables," in I. Ajzen and M. Fishbein (eds.), *Understanding Attitudes and Predicting Social Behavior*. NJ: Prentice-Hall, Inc., 1980, pp. 174-95.
25. Fishbein, Marvin, Carl H. Bowman, Kerry Thomas, James C. Jaccard and Icek Ajzen. "Predicting and Understanding Voting in British Elections and American Referenda," in I. Ajzen and M. Fishbein (eds.), *Understanding Attitudes and Predicting Social Behavior*. NJ: Prentice Hall, Inc., 1980, pp. 196-216.
26. Gibb, Gerald D., and Thomas T. Lambirth. "Who Are the Equal Rights Amendment Defenders and Opposers?," *Psychological Reports*, 51 (3, 1982), pp. 1233-42.
27. Gittel, Marilyn, and Teresa Shook. "Changing Women's Roles in Political Volunteerism and Reform of the City," *Signs*, 5 (3, 1980), pp. 67-78.
28. Goertzel, Ted G. "The Gender Gap: Sex, Family Income, and Political Attitudes in the 1980s," *American Sociological Association*, 1983, pp. 3511.
29. Gouldner, A.W. "Attitudes of 'Progressive' Trade Union Leaders," *American Journal of Sociology*, 52 (1947), pp. 389-92.
30. Greenstein, F.J. and R.W. Wolfinger. "The Suburbs and Shifting Party Loyalties," *Public Opinion Quarterly*, 22 (1958), pp. 473-82.
31. Hedlund, Ronald D., Patricia K. Freeman, Keith E. Hamm, and Robert M. Stein. "The Electability of Women Candidates: The Effects of Sex Role Stereotypes," *Journal of Politics*, 41 (2, 1979), pp. 513-24.

32. Hess, R.D., and J.V. Torney. *The Development of Political Attitudes in Children*. Chicago: Aldine, 1967.
33. Hutter, Harriet. *Sex Roles and Social Structures*. Oslo: Universitets Forlaget, 1970.
34. Haviland, C.L., and Janis, I.L. (eds.). *Personality and Persuasibility*. New Haven, CT: Yale University Press, 1959.
35. Hyde, J.S., E.R. Geiringer, and W.M. Yea. "On the Empirical Relations Between Spatial Ability and Sex Differences in Other Aspects of Cognitive Performance." *Multivariate Behavioral Research*, 10 (1975), pp. 289-309.
36. Joesting, Joan, and Robert Joesting. "Attitudes About Sex Roles, Sex, and Marital Status of Anti-Nixon Demonstrators: Comparison of Three Studies." *Psychological Reports*, 35 (3, 1974), pp. 1049-50.
37. Kelly, Rita M., and Mary A. Boudlier. "Mothers, Daughters, and the Socialization of Political Women." *Sex Roles*, 4 (3, 1978), pp. 415-43.
38. Kitt, Alice and D.B. Gleicher. "Determinants of Voting Behavior." *Public Opinion Quarterly*, 14 (1950), pp. 393-412.
39. Kotler, Phil. *Marketing for Nonprofit Organizations*. Englewood Cliffs: Prentice-Hall, Inc., 1973, Chapter 19.
40. Lambert, W.E. and O. Klinenberg. *Children's Views of Foreign Peoples*. New York: Appleton-Century-Crofts, 1967.
41. Lazarsfeld, P.F., B. Berelson, and H. Gaudet. *The People's Choice*. New York: Duell, Sloan and Pearce, 1944.
42. Leroy, David J., and Jack Lyle. "The Public Television Viewer and the Watergate Hearings." *Communication Research*, 14, (1974), pp. 406-25.
43. Lipset, S.M., P.F. Lazarsfeld, A.M. Burton and J. Ling. "The Psychology of Voting: An Analysis of Political Behavior." in G. Lindzey (ed.), *Handbook of Social Psychology*. Reading, MA: Addison-Wesley, 2 (1954), pp. 1124-75.
44. Maccoby, Eleanor (ed.). *The Development of Sex Differences*. Stanford: Stanford University Press, 1966.
45. Maccoby, E.E., and C.N. Jacklin. *The Psychology of Sex Differences*. Stanford, CA: Stanford University Press, 1974, pp. 114-20.
46. Maier, N.F.F. "An Aspect of Human Reasoning." *British Journal of Psychology*, 24 (1933), pp. 144-55.
47. Maier, N.F.F., and L.R. Hoffman. "Sex Differences, Sex Composition, and Group Problem Solving." *Journal of Abnormal and Social Psychology*, 63 (1961), pp. 453-56.
48. Markin, Ron. *Consumer Behavior: A Cognitive Orientation*. NY: Macmillan Publishers, 1974.
49. Markus, Hazel, Marie Crane, Stan Bernstein, and Michael Sliedi. "Self-Schemas and Gender." *Personality and Social Psychology*, 42 (1, 1982), pp. 38-50.
50. Merritt, Sharyne. "Sex Roles and Political Ambition." *Sex Roles*, 8 (9, 1982), pp. 1025-36.
51. Middleton, R. and S. Putney. "Political Expression of Adolescent Rebellion." *American Journal of Sociology*, 1963, pp. 527-55.
52. Milton, G.A. "Sex Differences in Problem Solving as a Function of Role Appropriateness of the Problem Content." *Psychological Reports*, 5 (1959), pp. 705-06.
53. Newman, Bruce L. "The Explanation and Prediction of Voting Intentions and Actual Behavior in a Presidential Primary Race." unpublished doctoral dissertation, University of Illinois, 1981.
54. Newman, Bruce L. "The Prediction and Explanation of Voting Behavior." in Bruce J. Walker et al. (eds.), *American Marketing Association Proceedings*, 48 (1982), pp. 284-89.
55. Palda, Kristian. "The Effects of Expenditure on Political Success." *The Journal of Law and Economics*, 18 (1975), pp. 743-71.
56. Priest, Robert F. and Phillip L. Hunsaker. "Compensating for a Female Disadvantage in Problem Solving." *Journal of Experimental Research in Personality*, 4 (1969), pp. 57-64.
57. Rapoport, Ronald B. "The Sex Gap in Political Persuading: Where the 'Structuring Principle' Works." *American Journal of Political Science*, 25 (1, 1981), pp. 32-48.
58. Rapoport, Ronald B. "Sex Differences in Attitude Expression: A Generational Expression." *Public Opinion Quarterly*, 46 (1, 1982), pp. 86-96.
59. Rarick, G.R. "Political Persuasion. The Newspaper and the Sexes." *Journalism Quarterly*, 47 (1970), pp. 360-64.
60. Rosenbaum, William B., Leonard L. Rosenbaum, and Elliott McGinnis. "Sex Differences in Selective Exposure." *The Journal of Social Psychology*, 92 (1974), pp. 85-89.
61. Rothschild, Michael L. "Political Advertising: A Neglected Policy Issue in Marketing." *Journal of Marketing Research*, 15 (1978), pp. 56-71.
62. Sapiro, Virginia. "If U.S. Senator Baker Were a Woman: An Experimental Study of Candidate Images." *Political Psychology*, 3 (1-2, 1981), pp. 61-83.
63. Sears, David O. "Political Behavior," in G. Lindzey and E. Aronson (eds.), *The Handbook of Social Psychology*. Reading, MA: Addison-Wesley, 3 (1968), pp. 315-458.
64. Shabad, Goldie, and Kristi Andersen. "Candidate Evaluations by Men and Women." *Public Opinion Quarterly*, 43, (1, 1979), pp. 18-35.
65. Shama, Abraham. "Political Marketing: A Study of Voter Decision Making Process and Candidate Marketing Strategy." in *Proceedings of AMA*, 1978, pp. 361-65.
66. Shapiro, D. and H. Tagiuri. "Sex Differences in Interim Personality Traits." *Journal of Psychology*, 47 (1959), pp. 327-36.
67. Sherman, Julia A. *Sex-Related Cognitive Differences*. Springfield, IL: Charles C. Thomas, 1975, pp. 172-79.
68. Sheih, Jaggish N. and Bruce L. Newman. "Determinants of Intention-Behavior Discrepancy in the 1980 National Elections," paper presented at the American Psychological Association Meeting, Los Angeles, August 1981.
69. Sigelman, Lee and Carol K. Sigelman. "Sexism, Race and Ageism in Voting Behavior: An Experimental Anal." *Social Psychology Quarterly*, 45 (1, 1982), pp. 263-69.
70. Stafford, R.E. "Hereditary and Environmental Components of Quantitative Reasoning." *Review of Educational Research*, 42 (1972), pp. 183-201.
71. Stouffer, S.A. *Communism, Conformity, and Liberty*. NY: Doubleday, 1955.
72. Wallach, M.A., and A.J. Caron. "Attribute Criterion: Sex-Linked Conservatism as Determinants of Psychological Similarity." *Journal of Abnormal Psychology*, 59 (1954), pp. 43-50.
73. Wallach, M.A., and N. Kogan. "Sex Differences in Judgment Processes." *Journal of Personality*, 27 (1959), pp. 555-61.
74. Welch, Susan. "Women as Political Animals? A Test of Some Explanations for Male-Female Political Participation Differences." *American Journal of Political Science*, 21 (1977), pp. 711-30.
75. Welch, Susan and Albert K. Karnit. "Correlations of Female Office Holding in City Politics." *Journal of Politics*, 41 (2, 1979), pp. 475-91.
76. Welch, Susan and Lee Sigelman. "Changes in Female Attitudes Toward Women in Politics." *Social Science Quarterly*, 63 (2, 1982), pp. 312-22.
77. Wilking, H.A. et al. *Personality Through Perception*. NY: Harper, 1954.