Factors That Lead to Women Being Elected to State Legislatures

Mary Alex Carter, Department of Political Science
Dr. James T. LaPlant, Department of Political Science

ABSTRACT

The question being posed in the study is "What factors predict the percentage of women in a state legislature?" The units of analysis are the 50 states. The independent variables investigated are the percentage of votes for Trump in the 2016 election per state, population density per square mile, percentage population 65 and older per state, percentage with a bachelor's degree or higher, 2018 per capita income, and the region of each state. The dependent value is the percentage of women elected in state legislatures. The relationship between the independent and dependent variables is expressed by five scatterplots and an analysis of variance (ANOVA). Among the independent variables, the percentage of Trump votes in the 2016 election per state, percentage with a bachelor's degree or higher, and 2018 per capita income were statistically significant. The percentage of votes for Trump in the 2016 election per state had a negative correlation while the other two had a positive correlation. The ANOVA showed that region explains 28% of the variance in the percentage of women elected into state legislatures.

What factors predict the percentage of women elected into state legislatures?

LITERATURE REVIEW

- In the 2018 elections, there was a surge of women elected which was coined "The Pink Wave."
- Of 7,383 state legislators in 2019, 1,876 are women. 1,144 of them are Democrats. 705 are Republicans (Carlsen, 2018)
- Most run not because of a desire to hold office but because of being triggered to "do something" (Carlsen, 2018). Lots of women are preparing other women to take their places by giving them tips on their everyday jobs (Carlsen, 2018).
- Democrats are more likely to choose a woman with the idea that she will be more liberal, but Republicans are less likely to choose a woman with the idea that she will be more moderate (Norwood, 2019).
- Women face different barriers such as not having networks or being asked different questions than men (Thorbecke, 2018).

DATA & METHODS

- The unit of analysis for this study are the 50 states.
- The dependent value is the percentage of women elected in state legislatures.
- The independent variables are the percentage of votes for Trump in the 2016 election per state (ideology), population density per square mile, percentage of 65 and older per state, the percentage of bachelor's degrees, the per capita income, and the region of each state.

HYPOTHESES

H1: As the percentage of the vote for Trump increases, the percentage of women serving in the state legislature will decline.
H2: As population density increases, the percentage of women serving in the state legislature will increase.
H3: As the percentage of 65 or older increases, the percentage of women serving in the state legislature will decline.
H4: As the percentage of the population with bachelor's degrees increases, the percentage of women serving in the state legislature will increase.
H5: As the per capita income rises, the percentage of women serving in the state legislature will increase.
H6: The percentage of women serving in the state legislatures will be highest in the Northeast and lowest in the South.

Table 1: Variables, Characteristics, & Sources

Variables	Minimum	Maximum	Mean	S.D.	Source
Percentage of women elected in state legislatures	10	52	28.488	8.876	National Conference of State Legislatures
Percentage vote for Trump	30	69	49.866	10.086	Federal Elections
Population density per square mile	1.3	1,210.1	198.276	264.093	U.S. Census Bureau
Percentage with bachelor's degree	21.3	42.1	30.114	5.056	U.S. Census Bureau
Per capita income (2018)	37,994	74,593	5.2e+04	8284.553	World Population Review
Percentage 65 or over	5.7	17.6	12.538	1.905	U.S. Census Bureau

Table 2: Correlation Analysis of Women Elected

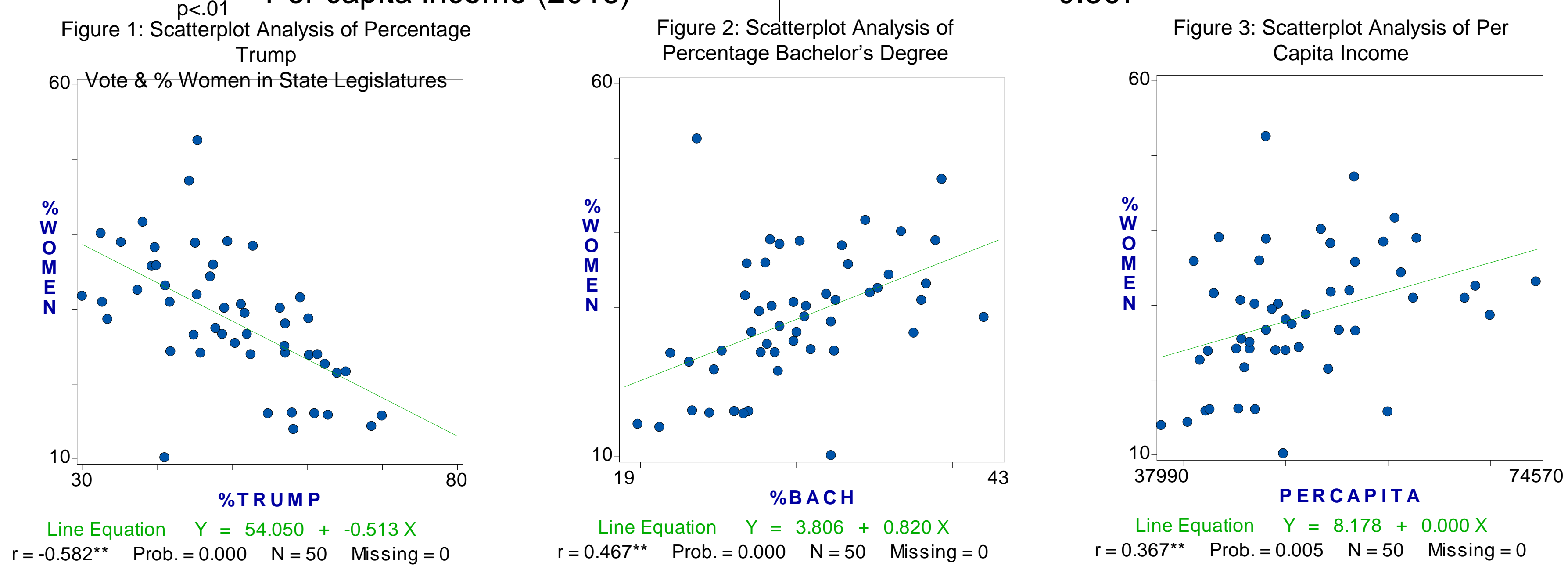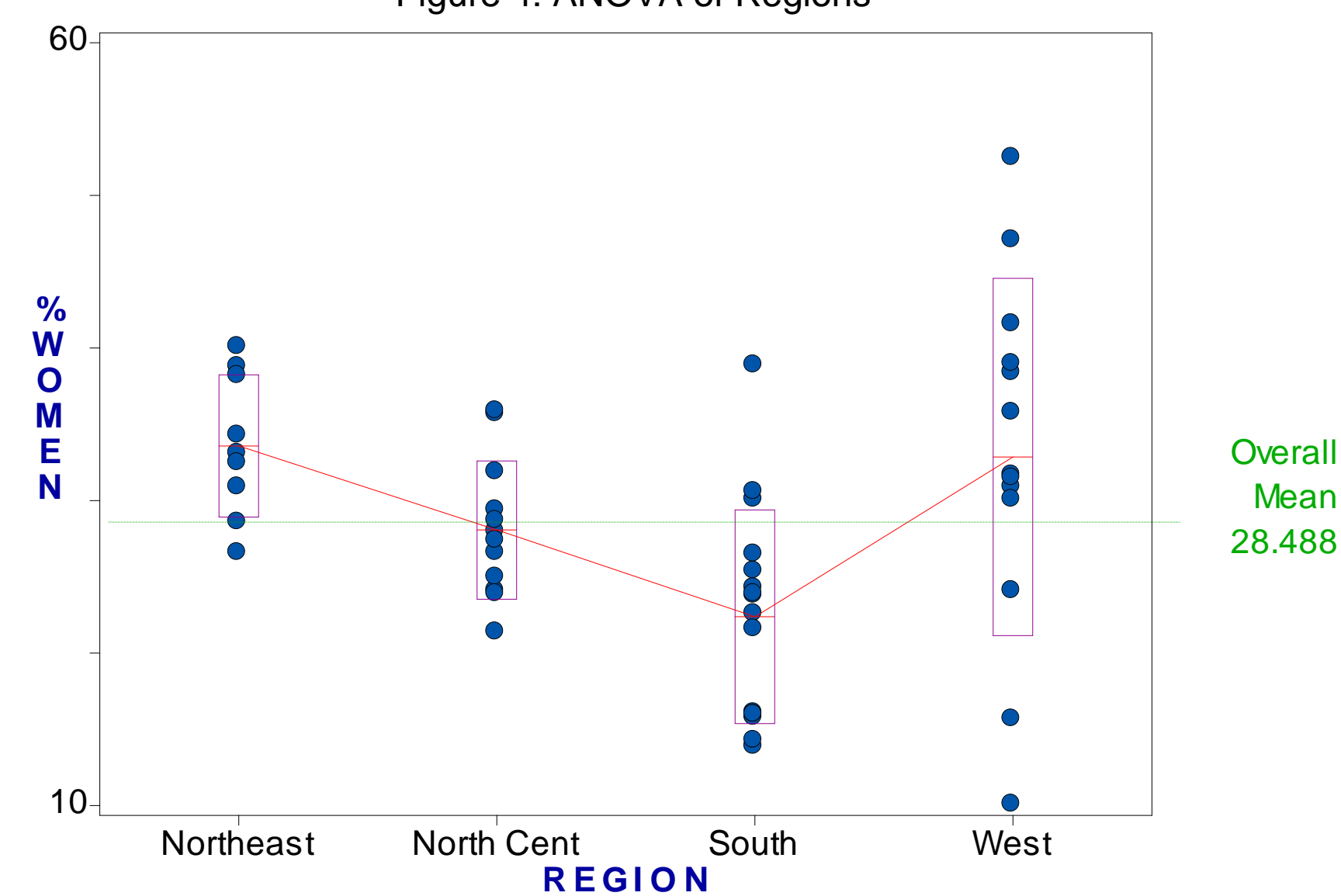| Independent Values	Women elected in state legislatures (%)
Percentage vote for Trump	-0.582**
Population density per square mile	0.156
Percentage 65 and over	-0.214
Percentage with bachelor's degree	0.467**
Per capita income (2018)	0.367**

N=50; *p<.05 p<.01

Figure 1: Scatterplot Analysis of Percentage Trump Vote & % Women in State Legislatures
Line Equation   Y = 54.050 + -0.513 X
r = -0.582**   Prob. = 0.000   N = 50   Missing = 0

Figure 2: Scatterplot Analysis of Percentage Bachelor's Degree
Line Equation   Y = 3.806 + 0.820 X
r = 0.467**   Prob. = 0.000   N = 50   Missing = 0

Figure 3: Scatterplot Analysis of Per Capita Income
Line Equation   Y = 8.178 + 0.000 X
r = 0.367**   Prob. = 0.005   N = 50   Missing = 0

Figure 4: ANOVA of Regions
Overall Mean 28.488

CONCLUSION

- Valdosta's first female representative decided to run for the open state House seat for District 175 in 2006. She won as a Democrat then stepped down as a Republican. The Democratic party supported her election, but after a few years, the Republican party furthered her service after the Governor asked her to switch parties to hold more vital roles in a majority Republican chamber.
- If the percentage of people that voted for Trump in 2016 is higher, there is likely a lesser percentage of women elected in a state legislature. If the per capita income of a state is high, the number of women in a state legislature will increase. If the percentage of bachelor's degrees in a state is high, the number of women in a state legislature will increase.
- Party ideologies play an important role in women elected. The Democratic party is also more open to new things.
- All three of the statistically significant values align with the literature review and show that the more liberal the area, the more likely they are to elect