## Supporting Information Appendix

## Selecting for Masculinity: The Double Bind and Women's Representation in the Republican Party

## Appendix

## Table of Contents

A Supporting Tables 2
A. 1 Study 1 and Study 2 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2
A. 2 Study 3 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
A. 3 Study 4 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 7
A. 4 Observational Study of Precinct Meetings . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 11

B Data Collection and Study Design Details 13
B. 1 Study 1 and Study 2 Details: 2016 and 2018 Cooperative Congressional Election Study . . . . 13
B. 2 Study 3 Details: 2016 Study of Republican Caucus Participants . . . . . . . . . . . . . . . . . . 15
B. 3 Study 4 Details: 2018 Study of Republican Caucus Participants . . . . . . . . . . . . . . . . . . 16
B. 4 Comparison of Republicans across Studies . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 17
B. 5 Study 5 Details: 2014 Caucus Observation . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 18

C Conflicts of Interest and Funding 20

## A Supporting Tables

## A. 1 Study 1 and Study 2

Table A1: Effects of Experimental Conditions on Candidate Trait Evaluations 2016-18 CCES

|  | Democratic Primary |  |  |  | Republican Primary |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Likeability |  | Competence |  | Likeability |  | Competence |  |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Feminine | $\begin{gathered} 0.368^{* * *} \\ (0.065) \end{gathered}$ | $\begin{gathered} 0.355^{* * *} \\ (0.065) \end{gathered}$ | $\begin{gathered} 0.064 \\ (0.063) \end{gathered}$ | $\begin{gathered} 0.048 \\ (0.063) \end{gathered}$ | $\begin{aligned} & 0.107^{*} \\ & (0.065) \end{aligned}$ | $\begin{gathered} 0.101 \\ (0.065) \end{gathered}$ | $\begin{gathered} -0.104 \\ (0.067) \end{gathered}$ | $\begin{gathered} -0.099 \\ (0.068) \end{gathered}$ |
| Law Grad Mom | $\begin{gathered} 0.362^{* * *} \\ (0.067) \end{gathered}$ | $\begin{gathered} 0.343^{* * *} \\ (0.067) \end{gathered}$ | $\begin{gathered} 0.067 \\ (0.065) \end{gathered}$ | $\begin{gathered} 0.065 \\ (0.065) \end{gathered}$ | $\begin{aligned} & 0.147^{* *} \\ & (0.067) \end{aligned}$ | $\begin{aligned} & 0.152^{* *} \\ & (0.066) \end{aligned}$ | $\begin{gathered} -0.184^{* * *} \\ (0.069) \end{gathered}$ | $\begin{gathered} -0.175^{* *} \\ (0.069) \end{gathered}$ |
| Mom Only | $\begin{gathered} 0.352^{* * *} \\ (0.067) \end{gathered}$ | $\begin{gathered} 0.346^{* * *} \\ (0.067) \end{gathered}$ | $\begin{gathered} -0.189 * * * \\ (0.065) \end{gathered}$ | $\begin{gathered} -0.188^{* * *} \\ (0.065) \end{gathered}$ | $\begin{gathered} 0.180^{* * *} \\ (0.066) \end{gathered}$ | $\begin{gathered} 0.182^{* * *} \\ (0.066) \end{gathered}$ | $\begin{gathered} -0.336^{* * *} \\ (0.068) \end{gathered}$ | $\begin{gathered} -0.329^{* * *} \\ (0.069) \end{gathered}$ |
| Respondent Characteristics |  |  |  |  |  |  |  |  |
| Woman |  | $\begin{aligned} & 0.122^{* *} \\ & (0.049) \end{aligned}$ |  | $\begin{aligned} & 0.092^{*} \\ & (0.047) \end{aligned}$ |  | $\begin{aligned} & -0.092^{*} \\ & (0.049) \end{aligned}$ |  | $\begin{gathered} 0.028 \\ (0.051) \end{gathered}$ |
| Age |  | $\begin{gathered} 0.001 \\ (0.001) \end{gathered}$ |  | $\begin{aligned} & 0.003^{* *} \\ & (0.001) \end{aligned}$ |  | $\begin{aligned} & -0.002 \\ & (0.001) \end{aligned}$ |  | $\begin{gathered} 0.001 \\ (0.001) \end{gathered}$ |
| Religiosity |  | $\begin{array}{r} -0.135 \\ (0.087) \end{array}$ |  | $\begin{aligned} & -0.066 \\ & (0.085) \end{aligned}$ |  | $\begin{gathered} 0.096 \\ (0.086) \end{gathered}$ |  | $\begin{gathered} 0.035 \\ (0.090) \end{gathered}$ |
| Married |  | $\begin{gathered} 0.002 \\ (0.052) \end{gathered}$ |  | $\begin{aligned} & -0.034 \\ & (0.051) \end{aligned}$ |  | $\begin{aligned} & 0.130^{* *} \\ & (0.050) \end{aligned}$ |  | $\begin{gathered} 0.014 \\ (0.052) \end{gathered}$ |
| Family Income |  | $\begin{gathered} 0.010 \\ (0.009) \end{gathered}$ |  | $\begin{gathered} 0.003 \\ (0.009) \end{gathered}$ |  | $\begin{gathered} 0.005 \\ (0.009) \end{gathered}$ |  | $\begin{gathered} -0.019^{* *} \\ (0.009) \end{gathered}$ |
| Nonwhite |  | $\begin{gathered} 0.080 \\ (0.052) \end{gathered}$ |  | $\begin{gathered} 0.164^{* * *} \\ (0.051) \end{gathered}$ |  | $\begin{aligned} & -0.048 \\ & (0.068) \end{aligned}$ |  | $\begin{aligned} & -0.032 \\ & (0.071) \end{aligned}$ |
| Education |  | $\begin{aligned} & -0.011 \\ & (0.017) \end{aligned}$ |  | $\begin{array}{r} -0.024 \\ (0.017) \end{array}$ |  | $\begin{gathered} 0.010 \\ (0.017) \end{gathered}$ |  | $\begin{gathered} -0.007 \\ (0.018) \end{gathered}$ |
| Survey Year | $\begin{gathered} -0.012 \\ (0.047) \end{gathered}$ | $\begin{gathered} 0.001 \\ (0.047) \end{gathered}$ | $\begin{gathered} -0.040 \\ (0.046) \end{gathered}$ | $\begin{gathered} -0.019 \\ (0.046) \end{gathered}$ | $\begin{gathered} 0.053 \\ (0.047) \end{gathered}$ | $\begin{gathered} 0.061 \\ (0.047) \end{gathered}$ | $\begin{gathered} -0.061 \\ (0.049) \end{gathered}$ | $\begin{aligned} & -0.057 \\ & (0.049) \end{aligned}$ |
| Constant | $\begin{gathered} 0.143^{* * *} \\ (0.051) \end{gathered}$ | $\begin{gathered} 0.062 \\ (0.130) \end{gathered}$ | $\begin{gathered} 0.074 \\ (0.050) \end{gathered}$ | $\begin{aligned} & -0.062 \\ & (0.127) \end{aligned}$ | $\begin{aligned} & -0.011 \\ & (0.051) \end{aligned}$ | $\begin{aligned} & -0.038 \\ & (0.123) \end{aligned}$ | $\begin{gathered} 0.062 \\ (0.054) \end{gathered}$ | $\begin{gathered} 0.110 \\ (0.128) \end{gathered}$ |
| Observations | 1,106 | 1,104 | 1,102 | 1,100 | 845 | 843 | 844 | 842 |
| R-squared | 0.039 | 0.052 | 0.019 | 0.040 | 0.012 | 0.032 | 0.033 | 0.043 |

Note: The dependent variable is the difference between the respondent's judgment of the woman candidate and the respondent's judgment of the man candidate with respect to each trait. Cell entries are OLS regression coefficients; standard errors in parentheses. ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$

Table A2: Relationship between Candidate Profile and Women's Electoral Success 2016-18 CCES

|  | Republican Primary |  | Democratic Primary |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) |
| Feminine | $\begin{gathered} 0.030 \\ (0.120) \end{gathered}$ | $\begin{gathered} 0.024 \\ (0.120) \end{gathered}$ | $\begin{gathered} 0.376^{* * *} \\ (0.108) \end{gathered}$ | $\begin{gathered} 0.388^{* * *} \\ (0.109) \end{gathered}$ |
| Law Grad Mom | $\begin{aligned} & -0.167 \\ & (0.122) \end{aligned}$ | $\begin{aligned} & -0.183 \\ & (0.123) \end{aligned}$ | $\begin{aligned} & 0.248^{* *} \\ & (0.110) \end{aligned}$ | $\begin{aligned} & 0.252^{* *} \\ & (0.112) \end{aligned}$ |
| Mom Only | $\begin{gathered} -0.275^{*} * \\ (0.122) \end{gathered}$ | $\begin{gathered} -0.279 * * \\ (0.123) \end{gathered}$ | $\begin{gathered} 0.142 \\ (0.108) \end{gathered}$ | $\begin{gathered} 0.138 \\ (0.109) \end{gathered}$ |
| Respondent Characteristics |  |  |  |  |
| Woman |  | $\begin{gathered} -0.108 \\ (0.091) \end{gathered}$ |  | $\begin{gathered} 0.228^{* * *} \\ (0.081) \end{gathered}$ |
| Age |  | $\begin{gathered} -0.002 \\ (0.003) \end{gathered}$ |  | $\begin{aligned} & -0.002 \\ & (0.002) \end{aligned}$ |
| Religiosity |  | $\begin{gathered} 0.142 \\ (0.161) \end{gathered}$ |  | $\begin{aligned} & -0.049 \\ & (0.147) \end{aligned}$ |
| Married |  | $\begin{gathered} 0.033 \\ (0.094) \end{gathered}$ |  | $\begin{aligned} & 0.183^{* *} \\ & (0.088) \end{aligned}$ |
| Family Income |  | $\begin{aligned} & -0.009 \\ & (0.016) \end{aligned}$ |  | $\begin{gathered} 0.014 \\ (0.015) \end{gathered}$ |
| Nonwhite |  | $\begin{aligned} & -0.079 \\ & (0.126) \end{aligned}$ |  | $\begin{gathered} 0.089 \\ (0.087) \end{gathered}$ |
| Education |  | $\begin{aligned} & -0.010 \\ & (0.032) \end{aligned}$ |  | $\begin{aligned} & -0.036 \\ & (0.029) \end{aligned}$ |
| Survey Year | $\begin{aligned} & 0.203^{* *} \\ & (0.087) \end{aligned}$ | $\begin{aligned} & 0.220^{* *} \\ & (0.088) \end{aligned}$ | $\begin{gathered} -0.047 \\ (0.078) \end{gathered}$ | $\begin{aligned} & -0.026 \\ & (0.079) \end{aligned}$ |
| Constant | $\begin{aligned} & -0.022 \\ & (0.094) \end{aligned}$ | $\begin{gathered} 0.186 \\ (0.229) \end{gathered}$ | $\begin{gathered} 0.300^{* * *} \\ (0.082) \end{gathered}$ | $\begin{gathered} 0.206 \\ (0.216) \end{gathered}$ |
| Observations | 859 | 857 | 1,127 | 1,124 |
| Log Likelihood | -589.0 | -585.6 | -700.8 | -691.2 |
| Pseudo R2 | 0.011 | 0.014 | 0.009 | 0.021 |

Note: The dependent variable is a dichotomous indicator of whether the respondent voted for the woman candidate. Cell entries are probit regression coefficients; standard errors in parentheses. The omitted category is the Masculine profile. ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *}$ p<0.05, * $\mathrm{p}<0.1$

Table A3: Relationship between Candidate Profile and Women's Electoral Success by Respondent Ideology 2016-18 CCES

|  | Republican Primary |  | Democratic Primary |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) |
| Feminine | $\begin{gathered} 0.177 \\ (0.135) \end{gathered}$ | $\begin{gathered} 0.163 \\ (0.136) \end{gathered}$ | $\begin{gathered} 0.311^{* * *} \\ (0.121) \end{gathered}$ | $\begin{gathered} 0.321^{* * *} \\ (0.122) \end{gathered}$ |
| Law Grad Mom | $\begin{aligned} & -0.193 \\ & (0.135) \end{aligned}$ | $\begin{aligned} & -0.211 \\ & (0.136) \end{aligned}$ | $\begin{gathered} 0.156 \\ (0.122) \end{gathered}$ | $\begin{gathered} 0.152 \\ (0.123) \end{gathered}$ |
| Mom Only | $\begin{aligned} & -0.205 \\ & (0.137) \end{aligned}$ | $\begin{gathered} -0.216 \\ (0.138) \end{gathered}$ | $\begin{gathered} 0.135 \\ (0.123) \end{gathered}$ | $\begin{gathered} 0.132 \\ (0.124) \end{gathered}$ |
| Strong Conservative | $\begin{gathered} 0.050 \\ (0.211) \end{gathered}$ | $\begin{gathered} 0.028 \\ (0.214) \end{gathered}$ |  |  |
| Feminine * Strong Con. | $\begin{gathered} -0.711^{*} * \\ (0.298) \end{gathered}$ | $\begin{gathered} -0.676^{* *} \\ (0.299) \end{gathered}$ |  |  |
| Law Grad Mom * Strong Con. | $\begin{gathered} 0.166 \\ (0.323) \end{gathered}$ | $\begin{gathered} 0.194 \\ (0.325) \end{gathered}$ |  |  |
| Mom Only * Strong Con. | $\begin{aligned} & -0.351 \\ & (0.299) \end{aligned}$ | $\begin{aligned} & -0.313 \\ & (0.301) \end{aligned}$ |  |  |
| Strong Liberal |  |  | $\begin{aligned} & -0.236 \\ & (0.177) \end{aligned}$ | $\begin{aligned} & -0.223 \\ & (0.179) \end{aligned}$ |
| Feminine * Strong Lib. |  |  | $\begin{gathered} 0.304 \\ (0.277) \end{gathered}$ | $\begin{gathered} 0.310 \\ (0.278) \end{gathered}$ |
| Law Grad Mom * Strong Lib. |  |  | $\begin{aligned} & 0.506^{*} \\ & (0.296) \end{aligned}$ | $\begin{aligned} & 0.555^{*} \\ & (0.299) \end{aligned}$ |
| Mom Only * Strong Lib. |  |  | $\begin{gathered} 0.019 \\ (0.260) \end{gathered}$ | $\begin{gathered} 0.015 \\ (0.262) \end{gathered}$ |
| Other Respondent Characteristics |  |  |  |  |
| Woman |  | $\begin{aligned} & -0.105 \\ & (0.092) \end{aligned}$ |  | $\begin{gathered} 0.225^{* * *} \\ (0.081) \end{gathered}$ |
| Age |  | $\begin{gathered} -0.002 \\ (0.003) \end{gathered}$ |  | $\begin{aligned} & -0.002 \\ & (0.002) \end{aligned}$ |
| Religiosity |  | $\begin{gathered} 0.056 \\ (0.167) \end{gathered}$ |  | $\begin{aligned} & -0.072 \\ & (0.149) \end{aligned}$ |
| Married |  | $\begin{gathered} 0.045 \\ (0.094) \end{gathered}$ |  | $\begin{aligned} & 0.185^{* *} \\ & (0.088) \end{aligned}$ |
| Family Income |  | $\begin{gathered} -0.011 \\ (0.016) \end{gathered}$ |  | $\begin{gathered} 0.013 \\ (0.015) \end{gathered}$ |
| Nonwhite |  | $\begin{aligned} & -0.066 \\ & (0.127) \end{aligned}$ |  | $\begin{gathered} 0.099 \\ (0.088) \end{gathered}$ |
| Education |  | $\begin{aligned} & -0.010 \\ & (0.032) \end{aligned}$ |  | $\begin{aligned} & -0.036 \\ & (0.030) \end{aligned}$ |
| Survey Year | $\begin{gathered} 0.246^{* * *} \\ (0.088) \end{gathered}$ | $\begin{gathered} 0.260^{* * *} \\ (0.089) \end{gathered}$ | $\begin{aligned} & -0.046 \\ & (0.078) \end{aligned}$ | $\begin{aligned} & -0.023 \\ & (0.080) \end{aligned}$ |
| Constant | $\begin{aligned} & -0.052 \\ & (0.103) \end{aligned}$ | $\begin{gathered} 0.170 \\ (0.238) \end{gathered}$ | $\begin{gathered} 0.353^{* * *} \\ (0.092) \end{gathered}$ | $\begin{gathered} 0.272 \\ (0.220) \end{gathered}$ |
| Observations | 859 | 857 | 1,127 | 1,124 |
| Log Likelihood | -582.6 | -579.8 | -698.5 | -688.8 |
| Pseudo R2 | 0.0214 | 0.0239 | 0.0127 | 0.0249 |

Note: The dependent variable is a dichotomous indicator of whether the respondent voted for the woman candidate. Cell entries are probit regression coefficients; standard errors in parentheses. The omitted category is the Masculine profile. *** $\mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$

## A. 2 Study 3

Table A4: Effects of Experimental Conditions on Candidate Trait Evaluations 2016 Caucus Attender Study

|  | Likeability |  | Competence |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) |
| Masculine+Mom | $\begin{gathered} 0.233^{* * *} \\ (0.028) \end{gathered}$ | $\begin{gathered} 0.229^{* * *} \\ (0.029) \end{gathered}$ | $\begin{gathered} -0.098^{* * *} \\ (0.031) \end{gathered}$ | $\begin{gathered} -0.106^{* * *} \\ (0.031) \end{gathered}$ |
| Feminine | $\begin{gathered} 0.158^{* * *} \\ (0.029) \end{gathered}$ | $\begin{gathered} 0.160^{* * *} \\ (0.029) \end{gathered}$ | $\begin{gathered} -0.201^{* * *} \\ (0.031) \end{gathered}$ | $\begin{gathered} -0.206^{* * *} \\ (0.031) \end{gathered}$ |
| Feminine+Mom | $\begin{gathered} 0.227^{* * *} \\ (0.029) \end{gathered}$ | $\begin{gathered} 0.225^{* * *} \\ (0.029) \end{gathered}$ | $\begin{gathered} -0.210^{* * *} \\ (0.031) \end{gathered}$ | $\begin{gathered} -0.217^{* * *} \\ (0.031) \end{gathered}$ |
| Mom Only | $\begin{gathered} 0.237^{* * *} \\ (0.029) \end{gathered}$ | $\begin{gathered} 0.238^{* * *} \\ (0.029) \end{gathered}$ | $\begin{gathered} -0.376^{* * *} \\ (0.031) \end{gathered}$ | $\begin{gathered} -0.381 * * * \\ (0.031) \end{gathered}$ |
| Gender Appeal | $\begin{aligned} & 0.030^{*} \\ & (0.018) \end{aligned}$ | $\begin{aligned} & 0.032^{*} \\ & (0.018) \end{aligned}$ | $\begin{gathered} 0.008 \\ (0.019) \end{gathered}$ | $\begin{gathered} 0.009 \\ (0.020) \end{gathered}$ |
| Respondent Characteristics |  |  |  |  |
| Woman |  | $\begin{aligned} & -0.025 \\ & (0.019) \end{aligned}$ |  | $\begin{aligned} & -0.015 \\ & (0.020) \end{aligned}$ |
| Age |  | $\begin{gathered} -0.001^{* *} \\ (0.001) \end{gathered}$ |  | $\begin{aligned} & 0.001 * * \\ & (0.001) \end{aligned}$ |
| Religiosity |  | $\begin{aligned} & -0.000 \\ & (0.038) \end{aligned}$ |  | $\begin{aligned} & -0.056 \\ & (0.041) \end{aligned}$ |
| Married |  | $\begin{gathered} 0.014 \\ (0.027) \end{gathered}$ |  | $\begin{gathered} 0.037 \\ (0.029) \end{gathered}$ |
| Income |  | $\begin{gathered} -0.000 \\ (0.005) \end{gathered}$ |  | $\begin{gathered} -0.006 \\ (0.005) \end{gathered}$ |
| Nonwhite |  | $\begin{aligned} & -0.043 \\ & (0.043) \end{aligned}$ |  | $\begin{aligned} & -0.032 \\ & (0.046) \end{aligned}$ |
| Education |  | $\begin{aligned} & 0.021^{*} \\ & (0.011) \end{aligned}$ |  | $\begin{gathered} 0.010 \\ (0.012) \end{gathered}$ |
| Constant | $\begin{gathered} 0.004 \\ (0.022) \end{gathered}$ | $\begin{gathered} -0.011 \\ (0.065) \end{gathered}$ | $\begin{gathered} -0.010 \\ (0.024) \end{gathered}$ | $\begin{gathered} -0.054 \\ (0.069) \end{gathered}$ |
| Observations | 4,629 | 4,533 | 4,632 | 4,536 |
| R-squared | 0.021 | 0.024 | 0.034 | 0.037 |

Note: The dependent variable is the difference between the respondent's judgment of the woman candidate and the respondent's judgment of the man candidate with respect to each trait. Cell entries are OLS regression coefficients; standard errors in parentheses. ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$

Table A5: Relationship between Candidate Profile and Women's Electoral Success 2016 Caucus Attender Study

|  | Basic Model |  | Interaction with Sex |  | Interaction with Ideology |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| Masculine+Mom | 0.175*** | $0.174^{* * *}$ | 0.103 | 0.110 | $0.202 * * *$ | 0.200*** |
|  | (0.055) | (0.057) | (0.074) | (0.078) | (0.072) | (0.075) |
| Feminine | -0.099* | -0.101* | -0.258*** | -0.280*** | -0.023 | -0.047 |
|  | (0.056) | (0.058) | (0.076) | (0.079) | (0.073) | (0.076) |
| Feminine+Mom | $-0.110^{* *}$ | -0.105* | $-0.205^{* * *}$ | -0.192** | -0.108 | -0.118 |
|  | (0.055) | (0.057) | (0.075) | (0.078) | (0.073) | (0.075) |
| Mom Only | $-0.177 * * *$ | $-0.180^{* * *}$ | -0.291*** | -0.296*** | -0.159** | -0.162** |
|  | (0.056) | (0.058) | (0.076) | (0.079) | (0.075) | (0.078) |
| Woman Respondent |  | 0.141*** | -0.036 | -0.050 |  | 0.129*** |
|  |  | (0.037) | (0.079) | (0.082) |  | (0.038) |
| Masculine+Mom * Woman |  |  | 0.161 | 0.137 |  |  |
|  |  |  | (0.111) | (0.114) |  |  |
| Feminine * Woman |  |  | $0.351^{* *}$ | 0.385*** |  |  |
|  |  |  | (0.112) | (0.116) |  |  |
| Feminine+Mom * Woman |  |  | 0.212* | 0.188 |  |  |
|  |  |  | (0.111) | (0.114) |  |  |
| Mom Only * Woman |  |  | 0.263** | 0.254** |  |  |
|  |  |  | (0.114) | (0.117) |  |  |
| Strong Conservative |  |  |  |  | -0.111 | -0.149* |
|  |  |  |  |  | (0.080) | (0.082) |
| Masculine+Mom * Strong Cons. |  |  |  |  | -0.070 | -0.070 |
|  |  |  |  |  | (0.112) | (0.116) |
| Feminine * Strong Cons. |  |  |  |  | -0.182 | -0.132 |
|  |  |  |  |  | (0.113) | (0.117) |
| Feminine+Mom * Strong Cons. |  |  |  |  | -0.008 | 0.032 |
|  |  |  |  |  | (0.112) | (0.116) |
| Mom Only * Strong Cons. |  |  |  |  | -0.034 | -0.031 |
|  |  |  |  |  | (0.114) | (0.117) |
| Gender Appeal | 0.108*** | 0.107*** | 0.110*** | 0.109*** | 0.111*** | 0.110*** |
|  | (0.035) | $(0.036)$ | (0.035) | $(0.036)$ | $(0.035)$ | $(0.036)$ |
| Other Respondent Characteristics |  |  |  |  |  |  |
| Age |  | -0.001 |  | -0.001 |  | -0.000 |
|  |  | (0.001) |  | (0.001) |  | (0.001) |
| Religiosity |  | 0.136* |  | 0.138* |  | 0.173** |
|  |  | (0.074) |  | (0.074) |  | (0.075) |
| Married |  | $0.206^{* * *}$ |  | 0.203*** |  | 0.220*** |
|  |  | (0.053) |  | (0.053) |  | (0.054) |
| Income |  | -0.031*** |  | -0.031*** |  | -0.033*** |
|  |  | (0.010) |  | (0.010) |  | (0.010) |
| Nonwhite |  | -0.102 |  | -0.099 |  | -0.104 |
|  |  | (0.085) |  | (0.085) |  | (0.086) |
| Education |  | 0.069*** |  | 0.071*** |  | 0.056** |
|  |  | (0.022) |  | (0.022) |  | (0.022) |
| Constant | -0.064 | -0.483*** | -0.049 | -0.405*** | -0.018 | -0.423*** |
|  | (0.043) | (0.127) | (0.056) | (0.131) | (0.055) | (0.132) |
| Observations | 5,092 | 4,831 | 5,092 | 4,831 | 5,092 | 4,831 |
| Log Likelihood | -3497 | -3295 | -3481 | -3289 | -3484 | -3282 |
| Pseudo R2 | 0.008 | 0.016 | 0.013 | 0.017 | 0.012 | 0.020 |

Note: The dependent variable is a dichotomous indicator of whether the respondent voted for the woman candidate. Cell entries are probit regression coefficients; standard errors in parentheses. The omitteg category is the Masculine profile. ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$

## A. 3 Study 4

Table A6: Experimental Profiles for Man and Woman Candidates: 2018 Caucus Attender Study

| Label | Text |
| :--- | :--- |
| Masculine | "I'm [a Vice President at a local bank / an engineer at a local software firm]. I'm [a committed <br> conservative/dedicated to conservative principles], and [I'm concerned about the heavy <br> federal tax burden, which hurts economic growth. I trust our state legislators more than <br> the politicians in Washington / I'm very worried about Washington's out-of-control budget <br> deficit. I want to see more spending decisions made at the state and local level]." |
| Masculine + Parent | "I'm [a Vice President at a local bank / an engineer at a local software firm] and a [mom/dad] <br> who volunteers at my kids' school. I'm [a committed conservative/dedicated to conservative |
| Feminineprinciples] ..." |  |
| "I'm [a teacher at a local school / a nurse at a local hospital]. [I'm a committed conservative, |  |
| and I really care about education. I want control over our schools to be handled closer to |  |
| home, not by bureaucrats in Washington./I'm dedicated to conservative principles, and I'm |  |
| focused on the performance of our schools. The federal government, with all its regulations, |  |
| is strangling state and local innovation in education]." |  |
| "I'm [a teacher at a local school / a nurse at a local hospital] and a [mom/dad] who volunteers |  |
| at my kids' school. I'm [a committed conservative,/dedicated to conservative principles] |  |

Figure A1: Gender Differences in Candidate Trait Evaluations (Man Candidate Described as Parent) 2018 Caucus Attender Survey


Note: Bars represent the difference between woman and man candidate trait evaluations; spikes indicate $95 \%$ confidence intervals. Estimates generated from conditions in Table A7 in which the male candidate has either a masculine or feminine profile.

Table A7: Effects of Experimental Conditions on Candidate Trait Evaluations 2018 Caucus Attender Study

|  | Likeability |  | Competence |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) |
| Masc. vs. Masc. Parent | $\begin{gathered} 0.199 * * * \\ (0.039) \end{gathered}$ | $\begin{gathered} 0.229^{* * *} \\ (0.040) \end{gathered}$ | $\begin{gathered} -0.139^{* * *} \\ (0.042) \end{gathered}$ | $\begin{gathered} -0.134^{* * *} \\ (0.043) \end{gathered}$ |
| Masc. vs. Fem. | $\begin{gathered} 0.121^{* * * *} \\ (0.034) \end{gathered}$ | $\begin{gathered} 0.159 * * * \\ (0.035) \end{gathered}$ | $\begin{gathered} -0.239 * * * \\ (0.036) \end{gathered}$ | $\begin{gathered} -0.224^{* * *} \\ (0.038) \end{gathered}$ |
| Masc. vs. Fem. Parent | $\begin{gathered} 0.179 * * * \\ (0.034) \end{gathered}$ | $\begin{gathered} 0.209^{* * *} \\ (0.035) \end{gathered}$ | $\begin{gathered} -0.317^{* * *} \\ (0.036) \end{gathered}$ | $\begin{gathered} -0.288^{* * *} \\ (0.037) \end{gathered}$ |
| Masc. Parent vs. Masc. | $\begin{gathered} -0.225^{* * *} \\ (0.039) \end{gathered}$ | $\begin{gathered} -0.218^{* * *} \\ (0.041) \end{gathered}$ | $\begin{gathered} 0.024 \\ (0.042) \end{gathered}$ | $\begin{gathered} 0.018 \\ (0.044) \end{gathered}$ |
| Masc. Parent vs. Masc. Parent | $\begin{gathered} -0.046 \\ (0.039) \end{gathered}$ | $\begin{gathered} -0.042 \\ (0.041) \end{gathered}$ | $\begin{gathered} -0.064 \\ (0.042) \end{gathered}$ | $\begin{aligned} & -0.050 \\ & (0.043) \end{aligned}$ |
| Masc. Parent vs. Fem. | $\begin{aligned} & -0.040 \\ & (0.034) \end{aligned}$ | $\begin{gathered} -0.020 \\ (0.035) \end{gathered}$ | $\begin{gathered} -0.247^{* * *} \\ (0.036) \end{gathered}$ | $\begin{gathered} -0.232^{* * *} \\ (0.037) \end{gathered}$ |
| Masc. Parent vs. Fem. Parent | $\begin{aligned} & 0.084^{* *} \\ & (0.034) \end{aligned}$ | $\begin{aligned} & 0.099^{* * *} \\ & (0.035) \end{aligned}$ | $\begin{gathered} -0.207^{* * *} \\ (0.036) \end{gathered}$ | $\begin{gathered} -0.201^{* * *} \\ (0.037) \end{gathered}$ |
| Fem. vs. Masc. | $\begin{gathered} -0.145^{* * *} \\ (0.034) \end{gathered}$ | $\begin{gathered} -0.116^{* * *} \\ (0.035) \end{gathered}$ | $\begin{gathered} 0.140^{* * *} \\ (0.036) \end{gathered}$ | $\begin{gathered} 0.155^{* * *} \\ (0.037) \end{gathered}$ |
| Fem. vs. Masc. Parent | $\begin{aligned} & -0.011 \\ & (0.034) \end{aligned}$ | $\begin{gathered} 0.009 \\ (0.035) \end{gathered}$ | $\begin{gathered} 0.112 * * * \\ (0.036) \end{gathered}$ | $\begin{aligned} & 0.129 * * * \\ & (0.037) \end{aligned}$ |
| Fem. vs. Fem. | $\begin{gathered} 0.042 \\ (0.039) \end{gathered}$ | $\begin{aligned} & 0.076^{*} \\ & (0.041) \end{aligned}$ | $\begin{gathered} 0.064 \\ (0.042) \end{gathered}$ | $\begin{aligned} & 0.073^{*} \\ & (0.044) \end{aligned}$ |
| Fem. vs. Fem. Parent | $\begin{gathered} 0.155^{* * *} \\ (0.039) \end{gathered}$ | $\begin{gathered} 0.171^{* * *} \\ (0.040) \end{gathered}$ | $\begin{aligned} & -0.064 \\ & (0.042) \end{aligned}$ | $\begin{aligned} & -0.060 \\ & (0.043) \end{aligned}$ |
| Fem. Parent vs. Masc. | $\begin{gathered} -0.284^{* * *} \\ (0.034) \end{gathered}$ | $\begin{gathered} -0.260^{* * *} \\ (0.035) \end{gathered}$ | $\begin{gathered} 0.168^{* * *} \\ (0.036) \end{gathered}$ | $\begin{gathered} 0.181^{* * *} \\ (0.038) \end{gathered}$ |
| Fem. Parent vs. Masc. Parent | $\begin{gathered} -0.079^{*} \\ (0.034) \end{gathered}$ | $\begin{gathered} -0.054 \\ (0.035) \end{gathered}$ | $\begin{aligned} & 0.078^{* *} \\ & (0.036) \end{aligned}$ | $\begin{aligned} & 0.094^{* *} \\ & (0.038) \end{aligned}$ |
| Fem. Parent vs. Masc. Parent | $\begin{gathered} -0.119^{* * *} \\ (0.039) \end{gathered}$ | $\begin{gathered} -0.093^{* *} \\ (0.041) \end{gathered}$ | $\begin{gathered} -0.034 \\ (0.042) \end{gathered}$ | $\begin{aligned} & -0.023 \\ & (0.043) \end{aligned}$ |
| Fem. Parent vs. Fem. Parent | $\begin{gathered} 0.027 \\ (0.039) \end{gathered}$ | $\begin{gathered} 0.050 \\ (0.041) \end{gathered}$ | $\begin{aligned} & -0.018 \\ & (0.042) \end{aligned}$ | $\begin{aligned} & -0.002 \\ & (0.043) \end{aligned}$ |
| Respondent Characteristics |  |  |  |  |
| Woman |  | $\begin{gathered} -0.064^{* * *} \\ (0.012) \end{gathered}$ |  | $\begin{gathered} -0.046^{* * *} \\ (0.013) \end{gathered}$ |
| Age |  | $\begin{gathered} 0.000 \\ (0.000) \end{gathered}$ |  | $\begin{aligned} & -0.000 \\ & (0.000) \end{aligned}$ |
| Religiosity |  | $\begin{gathered} -0.030 \\ (0.038) \end{gathered}$ |  | $\begin{gathered} 0.011 \\ (0.041) \end{gathered}$ |
| Married |  | $\begin{aligned} & -0.003 \\ & (0.018) \end{aligned}$ |  | $\begin{aligned} & -0.014 \\ & (0.020) \end{aligned}$ |
| Family Income |  | $\begin{aligned} & 0.005^{*} \\ & (0.003) \end{aligned}$ |  | $\begin{aligned} & 0.008^{* *} \\ & (0.003) \end{aligned}$ |
| Nonwhite |  | $\begin{gathered} -0.057^{* *} \\ (0.027) \end{gathered}$ |  | $\begin{aligned} & -0.017 \\ & (0.029) \end{aligned}$ |
| Education |  | $\begin{aligned} & 0.025^{* * *} \\ & (0.007) \end{aligned}$ |  | $\begin{gathered} 0.002 \\ (0.008) \end{gathered}$ |
| Constant | $\begin{aligned} & 0.055^{* *} \\ & (0.028) \end{aligned}$ | $\begin{aligned} & -0.040 \\ & (0.058) \end{aligned}$ | $\begin{gathered} 0.046 \\ (0.030) \end{gathered}$ | $\begin{gathered} 0.024 \\ (0.062) \end{gathered}$ |
| Observations | 10,564 | 9,720 | 10,571 | 9,731 |
| R-squared | 0.054 | 0.062 | 0.064 | 0.066 |

Note: The dependent variable is the difference between the respondent's judgment of the woman candidate and the respondent's judgment of the man candidate with respect to each trait. Cell entries are OLS regression coefficients; standard errors in parentheses. The experimental condition labels indicate the profile of the man candidate vs. the profile of the woman candidate. The omitted category is the Masculine vs. Masculine profile. ${ }^{* * *} \mathrm{p}<0.01$, ${ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$

Table A8: Relationship between Candidate Profile and Women's Electoral Success 2018 Caucus Attenders

|  | All Republican Respondents |  | Strong Conservatives Only |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) |
| Masc. vs. Masc. Parent | $\begin{gathered} 0.079 \\ (0.084) \end{gathered}$ | $\begin{gathered} 0.105 \\ (0.089) \end{gathered}$ | $\begin{gathered} -0.129 \\ (0.135) \end{gathered}$ | $\begin{gathered} -0.069 \\ (0.141) \end{gathered}$ |
| Masc. vs. Fem. | $\begin{gathered} -0.215^{* * *} \\ (0.072) \end{gathered}$ | $\begin{gathered} -0.179^{* *} \\ (0.076) \end{gathered}$ | $\begin{gathered} -0.443^{* * *} \\ (0.115) \end{gathered}$ | $\begin{gathered} -0.401^{* * *} \\ (0.120) \end{gathered}$ |
| Masc. vs. Fem. Parent | $\begin{gathered} -0.234^{* * *} \\ (0.072) \end{gathered}$ | $\begin{gathered} -0.193^{* *} \\ (0.076) \end{gathered}$ | $\begin{gathered} -0.442^{* * *} \\ (0.114) \end{gathered}$ | $\begin{gathered} -0.373^{* * *} \\ (0.119) \end{gathered}$ |
| Masc. Parent vs. Masc. | $\begin{gathered} -0.185^{*} * \\ (0.083) \end{gathered}$ | $\begin{gathered} -0.185^{* *} \\ (0.088) \end{gathered}$ | $\begin{gathered} -0.364^{* * *} \\ (0.133) \end{gathered}$ | $\begin{gathered} -0.298^{* *} \\ (0.140) \end{gathered}$ |
| Masc. Parent vs. Masc. Parent | $\begin{aligned} & -0.059 \\ & (0.083) \end{aligned}$ | $\begin{aligned} & -0.040 \\ & (0.088) \end{aligned}$ | $\begin{aligned} & -0.130 \\ & (0.134) \end{aligned}$ | $\begin{aligned} & -0.051 \\ & (0.141) \end{aligned}$ |
| Masc. Parent vs. Fem. | $\begin{gathered} -0.482^{* * *} \\ (0.072) \end{gathered}$ | $\begin{gathered} -0.469^{* * *} \\ (0.077) \end{gathered}$ | $\begin{gathered} -0.653^{* * *} \\ (0.116) \end{gathered}$ | $\begin{gathered} -0.667^{* * *} \\ (0.121) \end{gathered}$ |
| Masc. Parent vs. Fem. Parent | $\begin{gathered} -0.348^{* * *} \\ (0.072) \end{gathered}$ | $\begin{gathered} -0.352^{* * *} \\ (0.076) \end{gathered}$ | $\begin{gathered} -0.504^{* * *} \\ (0.115) \end{gathered}$ | $\begin{gathered} -0.486^{* * *} \\ (0.121) \end{gathered}$ |
| Fem. vs. Masc. | $\begin{aligned} & -0.001 \\ & (0.072) \end{aligned}$ | $\begin{aligned} & -0.001 \\ & (0.076) \end{aligned}$ | $\begin{gathered} 0.010 \\ (0.115) \end{gathered}$ | $\begin{gathered} 0.048 \\ (0.120) \end{gathered}$ |
| Fem vs. Masc. Parent | $\begin{gathered} 0.269^{* * *} \\ (0.073) \end{gathered}$ | $\begin{gathered} 0.307^{* * *} \\ (0.077) \end{gathered}$ | $\begin{gathered} 0.187 \\ (0.115) \end{gathered}$ | $\begin{aligned} & 0.268^{* *} \\ & (0.120) \end{aligned}$ |
| Fem. vs. Fem. | $\begin{gathered} 0.085 \\ (0.084) \end{gathered}$ | $\begin{gathered} 0.112 \\ (0.089) \end{gathered}$ | $\begin{gathered} 0.098 \\ (0.134) \end{gathered}$ | $\begin{gathered} 0.191 \\ (0.142) \end{gathered}$ |
| Fem. vs. Fem. Parent | $\begin{gathered} 0.119 \\ (0.084) \end{gathered}$ | $\begin{aligned} & 0.190^{* *} \\ & (0.089) \end{aligned}$ | $\begin{aligned} & -0.107 \\ & (0.133) \end{aligned}$ | $\begin{aligned} & -0.041 \\ & (0.140) \end{aligned}$ |
| Fem. Parent vs. Masc. | $\begin{aligned} & -0.108 \\ & (0.072) \end{aligned}$ | $\begin{aligned} & -0.095 \\ & (0.076) \end{aligned}$ | $\begin{aligned} & -0.025 \\ & (0.115) \end{aligned}$ | $\begin{gathered} 0.019 \\ (0.120) \end{gathered}$ |
| Fem. Parent vs. Masc. Parent | $\begin{aligned} & 0.125^{*} \\ & (0.073) \end{aligned}$ | $\begin{gathered} 0.122 \\ (0.077) \end{gathered}$ | $\begin{gathered} 0.184 \\ (0.115) \end{gathered}$ | $\begin{aligned} & 0.232^{*} \\ & (0.120) \end{aligned}$ |
| Fem. Parent vs. Fem. | $\begin{gathered} -0.269^{* * *} \\ (0.083) \end{gathered}$ | $\begin{gathered} -0.230^{* * *} \\ (0.087) \end{gathered}$ | $\begin{gathered} -0.346^{* * *} \\ (0.132) \end{gathered}$ | $\begin{aligned} & -0.232^{*} \\ & (0.138) \end{aligned}$ |
| Fem. Parent vs. Fem. Parent | $\begin{aligned} & -0.050 \\ & (0.083) \end{aligned}$ | $\begin{aligned} & -0.020 \\ & (0.088) \end{aligned}$ | $\begin{aligned} & -0.153 \\ & (0.133) \end{aligned}$ | $\begin{gathered} -0.130 \\ (0.139) \end{gathered}$ |
| Respondent Characteristics |  |  |  |  |
| Woman |  | $\begin{gathered} -0.104^{* * *} \\ (0.026) \end{gathered}$ |  | $\begin{gathered} -0.104^{* *} \\ (0.042) \end{gathered}$ |
| Age |  | $\begin{aligned} & -0.001 \\ & (0.001) \end{aligned}$ |  | $\begin{aligned} & -0.001 \\ & (0.001) \end{aligned}$ |
| Religiosity |  | $\begin{gathered} 0.014 \\ (0.082) \end{gathered}$ |  | $\begin{aligned} & -0.062 \\ & (0.127) \end{aligned}$ |
| Married |  | $\begin{aligned} & -0.007 \\ & (0.040) \end{aligned}$ |  | $\begin{gathered} 0.083 \\ (0.061) \end{gathered}$ |
| Family Income |  | $\begin{gathered} 0.022^{* * *} \\ (0.007) \end{gathered}$ |  | $\begin{gathered} 0.016 \\ (0.011) \end{gathered}$ |
| Nonwhite |  | $\begin{aligned} & -0.068 \\ & (0.059) \end{aligned}$ |  | $\begin{aligned} & -0.002 \\ & (0.083) \end{aligned}$ |
| Education |  | $\begin{gathered} 0.042^{* * *} \\ (0.016) \end{gathered}$ |  | $\begin{gathered} 0.033 \\ (0.024) \end{gathered}$ |
| Constant | $\begin{gathered} 0.180^{* * *} \\ (0.059) \end{gathered}$ | $\begin{gathered} -0.018 \\ (0.125) \end{gathered}$ | $\begin{aligned} & 0.215^{* *} \\ & (0.095) \end{aligned}$ | $\begin{gathered} 0.038 \\ (0.194) \end{gathered}$ |
| Observations | 11,048 | 9,967 | 4,618 | 4,214 |
| Log Likelihood | -7485 | -6721 | -3092 | -2803 |
| Pseudo R2 | 0.0195 | 0.0235 | 0.0336 | 0.0399 |

Note: The dependent variable is a dichotomous indicator of whether the respondent voted for the woman candidate. Cell entries are probit regression coefficients; standard errors in parentheses. The experimental condition labels indicate the profile of the man candidate vs. the profile of the woman candidate. The omitted category is the Masculine vs. Masculine profile. ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$

## A. 4 Observational Study of Precinct Meetings

Table A9: Electoral Success and Candidate Self-Presentation
Caucus Observation Study

|  | Women |  |  | Men |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ |  |
|  |  |  |  |  |  |
| Female Self-Presentation | $-0.578^{*}$ | $-0.558^{*}$ | -0.068 | -0.062 |  |
|  | $(0.315)$ | $(0.315)$ | $(0.202)$ | $(0.202)$ |  |
| Male Self-Presentation |  | 0.040 |  | 0.013 |  |
|  |  | $(0.266)$ |  | $(0.156)$ |  |
| Mentioned Gender | 0.506 | 0.513 | 0.084 | 0.077 |  |
|  | $(0.415)$ | $(0.416)$ | $(0.553)$ | $(0.552)$ |  |
| Mentioned Qualifications | 0.223 | 0.240 | 0.038 | 0.046 |  |
|  | $(0.281)$ | $(0.279)$ | $(0.156)$ | $(0.157)$ |  |
| Mentioned Ideology | 0.171 |  | 0.119 |  |  |
|  | $(0.262)$ |  | $(0.153)$ |  |  |
| Mentioned Issues | 0.389 | 0.415 | 0.041 | 0.068 |  |
|  | $(0.307)$ | $(0.304)$ | $(0.160)$ | $(0.160)$ |  |
| No Speech Given | -0.569 | -0.595 | -0.344 | -0.379 |  |
|  | $(0.566)$ | $(0.565)$ | $(0.302)$ | $(0.302)$ |  |
| Number of Delegate Positions Available | 0.190 | 0.194 | 0.067 | 0.068 |  |
|  | $(0.152)$ | $(0.152)$ | $(0.087)$ | $(0.087)$ |  |
| Mean Age of Caucus Participants | -0.022 | -0.020 | 0.023 | 0.023 |  |
|  | $(0.029)$ | $(0.029)$ | $(0.015)$ | $(0.015)$ |  |
| Number of Caucus Participants | -0.002 | -0.002 | $-0.008^{*}$ | $-0.008^{*}$ |  |
|  | $(0.007)$ | $(0.007)$ | $(0.004)$ | $(0.004)$ |  |
| Proportion of Caucus Participants Who Are Women | 0.173 | 0.339 | 0.111 | 0.061 |  |
|  | $(1.700)$ | $(1.706)$ | $(0.884)$ | $(0.883)$ |  |
| Distance between Precinct and Convention Site | -0.455 | -0.498 | -0.043 | -0.069 |  |
| Constant | $(1.242)$ | $(1.240)$ | $(0.749)$ | $(0.750)$ |  |
| Observations | 0.529 | 0.387 | -1.282 | -1.234 |  |
| Log Likelihood | $(1.844)$ | $(1.860)$ | $(0.949)$ | $(0.946)$ |  |
| Pseudo R2 |  |  |  |  |  |

Note: The dependent variable is a dichotomous indicator of whether the candidate was elected as a state delegate. Female Self-Presentation is defined as mentioning being a homemaker or parent, mentioning education as an issue, or mentioning family. Male Self-Presentation is defined as mentioning business or executive experience, military background, conservative ideology, taxes, and government spending or deficits. Mentioning ideology is not included in models with Male Self-Presentation because of collinearity. Cell entries are probit regression coefficients; standard errors in parentheses. ${ }^{* * *} \mathrm{p}<0.01,{ }^{* *} \mathrm{p}<0.05,{ }^{*} \mathrm{p}<0.1$

Figure A2: Marginal Effect of Female Self-Presentation Caucus Observation Study


Note: Points represent the average marginal effect of female self-presentation; spikes represent $95 \%$ confidence intervals. Estimates generated from columns 1 and 3 of Table A9.

## B Data Collection and Study Design Details

This paper draws on five sets of original data collection. Below we discuss the human subjects research considerations for each one.

## B. 1 Study 1 and Study 2 Details: 2016 and 2018 Cooperative Congressional Election Study

The CCES is an election survey designed by a consortium of researchers and administered by YouGov. The CCES homepage (https:/ /cces.gov.harvard.edu/) explains:

The CCES is a 50,000+ person national stratified sample survey administered by YouGov. Half of the questionnaire consists of Common Content asked of all 50,000+ people, and half of the questionnaire consists of Team Content designed by each individual participating team and asked of a subset of 1,000 people. In addition, several teams may pool their resources to create Group Content.

The survey consists of two waves in election years. In the pre-election wave, respondents answer two-thirds of the questionnaire. This segment of the survey asks about general political attitudes, various demographic factors, assessment of roll call voting choices, political information, and vote intentions. The pre-election wave is in the field from late September to late October. In the post-election wave, respondents answer the other third of the questionnaire, mostly consisting of items related to the election that just occurred. The post-election wave is administered in November.

Below are questions and answers regarding ethics from the CCES FAQ page at
https:/ /cces.gov.harvard.edu/frequently-asked-questions:
How are respondents recruited into the CCES?
A large portion of the CCES respondents are YouGov panelists. These are people who have made an account on yougov.com to receive periodic notifications about new surveys. Others are recruited live from online advertisements or are recruited from another survey provider. Therefore, while panelists are prompted to participate in the CCES, they opt-in to being a YouGov panelist. In order to make the sample representative, not all respondents to the CCES questionnaire end up in the final dataset. To read more about the pruning process used to match to the target population, please refer to the guide.

Are respondents compensated for their responses?
YouGov respondents are compensated by points for taking each survey. Respondents can exchange accumulated points with giftcards and other prizes.

## B.1. 1 Study 1 and Study 2 Recruitment

The 2016 and 2018 CCES studies involved research teams at 60 institutions. Subjects for the 2016 CCES were recruited during the fall of 2016. Each research team purchased a 1,000 person national sample survey, conducted by YouGov of Redwood City, CA. Interviews were conducted in two waves. The pre-election wave of the questionnaire was in the field from September 28 to November 7; the post-election wave was in the field from November 9 to December 14. For each survey of 1,000 persons, half of the questionnaire was developed and controlled entirely by each individual research team, and half of the questionnaire is devoted to Common Content.

Subjects for 2018 CCES were recruited during the fall of 2018. As in 2016, each research team purchased a 1,000 person national sample survey, conducted by YouGov. Interviews for the 2018 survey were conducted in two waves. The pre-election wave of the questionnaire was in the field from September 27 to November 5; the post-election wave was in the field from November 7 to December 3.

In both 2016 and 2018, respondents were selected for the survey using YouGov's matched random sample methodology and completed the surveys via the Internet. Technical details of the matched random sample procedure are discussed in (Jackman and Vavreck 2010). The survey is not a traditional probability sample, but several recent studies have shown that the matched random sample methodology produces a sample that closely resembles various other types of representative samples collected at a similar point in time (Ansolabehere and Persily 2008; Vavreck and Rivers 2008).

## B.1. 2 Study 1 and Study 2 Summary Statistics

Table A10: Summary Statistics
Study 1
2016 CCES

| Variable | Mean | Std. Dev. | $\mathbf{N}$ |
| :--- | :---: | :---: | :---: |
| Woman | 0.559 | 0.497 | 1000 |
| Age | 47.331 | 16.949 | 1000 |
| Religiosity | 0.441 | 0.289 | 1000 |
| Married | 0.525 | 0.5 | 1000 |
| Family Income (16 categories) | 6.191 | 3.093 | 1000 |
| Nonwhite | 0.315 | 0.465 | 1000 |
| Education (6 categories) | 3.654 | 1.486 | 1000 |
| Party ID (7 categories) | 3.592 | 2.201 | 999 |

Table A11: Summary Statistics
Study 2
2018 CCES

| Variable | Mean | Std. Dev. | $\mathbf{N}$ |
| :--- | :---: | :---: | :---: |
| Woman | 0.561 | 0.497 | 1000 |
| Age | 48.017 | 17.789 | 1000 |
| Religiosity | 0.452 | 0.291 | 997 |
| Married | 0.498 | 0.5 | 1000 |
| Family Income (16 categories) | 6.396 | 3.16 | 995 |
| Nonwhite | 0.254 | 0.436 | 1000 |
| Education | 3.653 | 1.516 | 1000 |
| Party ID (7 categories) | 3.914 | 2.294 | 998 |

## B. 2 Study 3 Details: 2016 Study of Republican Caucus Participants

## B.2.1 Study 3 Recruitment and Summary Statistics

We sent a single emailed invitation to 51,867 Republican presidential caucus participants who had registered online with the state Republican Party and received 10,056 finished surveys and an additional 915 partial responses with 10,971 total respondents answering at least one question. This gives an overall response rate of 21 percent. The response to a single email invitation was much greater than expected, probably due to a combination of high political engagement, interest in the survey topic, and an extremely accurate email list. Consequently, we did not attempt any reminders or additional contact. Not all Republican caucus participants provided an email address, but the vote distribution among our online sample matches the overall vote distribution for all caucus participants in terms of both magnitude of support and candidate preference order, suggesting that our sample is representative of Republican caucus attenders statewide. We report results for the respondents randomly assigned to complete the experiment described in the manuscript, which was approximately half the sample.

This survey was approved as an amendment to IRB \#X130426. Participants were recruited via email and given the opportunity to electronically consent or not on the first page of the Qualtrics survey. Participants were not deceived and were not compensated. Risks were minimal and there were no benefits to the participants beyond "helping increase knowledge of [Redacted State]'s voters."

## B.2.2 Study 3 Summary Statistics

Table A12: Summary Statistics
Study 3
2016 Caucus Attender Study
Experiment Participants Only

| Variable | Mean | Std. Dev. | $\mathbf{N}$ |
| :--- | :---: | :---: | :---: |
| Woman | 0.443 | 0.497 | 5092 |
| Age | 51.82 | 16.573 | 4841 |
| Religiosity | 0.892 | 0.255 | 4925 |
| Married | 0.807 | 0.395 | 5092 |
| Family Income (9 categories) | 4.889 | 2.007 | 5092 |
| Nonwhite | 0.046 | 0.21 | 5092 |
| Education (5 categories) | 3.928 | 0.881 | 4924 |

## B. 3 Study 4 Details: 2018 Study of Republican Caucus Participants

## B.3.1 Study 4 Recruitment

Between July 26 and August 12, 2018, we invited the 51,494 Republican presidential caucus participants who remained in our 2016 panel to respond to another survey (the total panel is a little smaller because some panelists opted out of the list when invited in 2016). Of the 2018 survey respondents that were still state residents two years later, we received 11,043 finished surveys and an additional 1,294 partial responses with 12,337 total respondents answering at least one question beyond the initial residency qualifying question. This gives an overall response rate of 24 percent. The response rate is slightly higher than the 2016 survey, but to achieve a comparable response rate in 2018 we sent three total emails instead of a single email. We continue to have confidence that this sample of Republicans is representative of the state's Republican primary voters because the vote distribution among our online sample closely matches the overall vote distribution Republican primary voters statewide for a statewide Republican primary election held a few weeks earlier in 2018.

This survey was approved as IRB \#E18306. Participants were recruited via email and given the opportunity to electronically consent or not on the first page of the Qualtrics survey. Participants were not deceived and were not compensated. Risks were minimal and there were no benefits to the participants beyond "helping increase knowledge of [Redacted State]'s voters."

## B.3.2 Study 4 Summary Statistics

Table A13: Summary Statistics Study 4
2018 Caucus Attender Study

| Variable | Mean | Std. Dev. | $\mathbf{N}$ |
| :--- | :---: | :---: | :---: |
| Woman | 0.347 | 0.476 | 13928 |
| Age | 54.14 | 15.574 | 10571 |
| Religiosity | 0.949 | 0.163 | 10348 |
| Married | 0.656 | 0.475 | 13928 |
| Income (9 categories) | 5.199 | 1.745 | 13928 |
| Nonwhite | 0.038 | 0.191 | 13928 |
| Education (5 categories) | 4.046 | 0.832 | 10672 |

## B. 4 Comparison of Republicans across Studies

Our study includes multiple samples of Republicans, including both nationally representative samples and samples of caucus attenders from a single state. Table A14 highlights the demographic characteristics of each sample. The first column is our nationally representative sample of Republicans who responded to our CCES modules in 2016 or 2018 and who indicated that they had participated in a primary or caucus or would do so if they had the opportunity. Because these are self-reports, the sample likely includes some who did not actually participate. The second column is a national sample of validated GOP primary voters and caucus attenders collected by YouGov in 2015 for a different study. This is the best point of comparison for our state-level samples, which are shown in the last two columns. As can be seen, our state-level samples of caucus attenders are very similar to the national sample in their gender, racial, and ideological composition, as well as in marital status. The primary difference is that our state-level samples are younger and better educated than the national sample of GOP primary voters, two attributes we expect would work against the sorts of gender bias we document. These comparisons provide strong evidence that our state-level samples are similar to the national Republican primary selectorate. Our CCES sample, by contrast, includes slightly fewer of the most conservative Republicans than samples of verified primary participants.

Table A14: Demographic Characteristics of Republican Samples

|  | CCES <br> Modules <br> $(\mathbf{2 0 1 6 - 1 8 )}$ | Primary <br> Voters <br> $\mathbf{( 2 0 1 5 )}$ | Caucus <br> Attenders <br> $\mathbf{( 2 0 1 6 )}$ | Caucus <br> Attenders <br> $\mathbf{( 2 0 1 8 )}$ |
| :--- | :---: | :---: | :---: | :---: |
| Mean Age | 54.3 | 64.0 | 51.8 | 54.1 |
| \% Men | 55.0 | 59.3 | 55.7 | 65.3 |
| \% College Graduates | 35.7 | 51.9 | 69.4 | 74.3 |
| \% White | 87.0 | 92.7 | 95.4 | 96.2 |
| \% Married | 68.6 | 75.0 | 80.7 | 65.6 |
| \% Very/Strong Conservative | 25.1 | 37.5 | 42.4 | 41.8 |
| N | 484 | 2,864 | 5,092 | 13,928 |

[^0]
## B. 5 Study 5 Details: 2014 Caucus Observation

This research was conducted under Brigham Young University IRB Approval \#X130426. Student observers were recruited to attend - but not participate in - caucus meetings as one of several choices about how to complete a class assignment.

Because these were public meetings and participants had no assumption of privacy, subjects were not normally informed about the observers' presence, though observers were asked to introduce themselves to the party worker at the check in booth and the precinct chair as a courtesy. Each observer had a letter from the state party chair to present to the precinct chair upon arrival. The letter explained that consistent with party rules, non-participating observers were allowed to attend and take notes.

In a handful of cases, caucus attendees asked the observers why they were taking notes and they explained themselves in keeping with the instructions below. Here are the relevant instructions to the observers from the training materials:

When you arrive at the location, there should be a check-in booth. Check with the official to make sure you're at the correct precinct-at many locations, there are multiple precincts meeting in different rooms, and it is imperative that you are at the correct one. If, for some reason, more than one precinct is meeting together in the same room, please call the hotline to let us know and make a note of that on your observer sheet.

Tell the check-in volunteer that you are there as a silent observer for a class project to better understand the [Redacted] neighborhood caucus system. Show him or her the letter from [redacted] (the [Redacted] Republican Party Chair) and the [Redacted] Professors that explains that you are allowed to be there. You do not need to sign the roll or register as a Republican.

Ask the volunteer to point out the precinct chair to you. Introduce yourself to the precinct chair, explaining that you are there for a class project to understand the neighborhood caucus system. Emphasize that you will be a silent observer and just take notes. You should not have any problems-anyone is allowed to attend a Republican caucus meeting. If you do have problems, ask to speak with the precinct chair or vice chair. If you continue to have problems, call us at [redacted]. Always be respectful and polite.

Take a seat near the back of the room. If possible, please sit somewhat apart from your partner. This will help you see and hear different things. We want two independent observations, so it is also important that you don't talk with your partner during the meeting. If you miss something during the meeting, just skip it and move on. Don't ask around for the missing information.

None of our student observers reported any negative reactions by caucus attendees, and most reports suggested that they were easily able to blend in and observe unobtrusively.

## B.5.1 Caucus Observers

Caucus observers were undergraduate and graduate students at three different university campuses in three different counties in the state. They attended meetings in the four most populous counties in the state that account for three-quarters of the state's population.

Prior to attending the caucuses, student observers were trained and given a guided notes sheet on which they were ask to record notes about what occurred at the meeting, including the following items:

- Whether or not the precinct official followed certain party protocol and rules
- Candidate name and gender for each office nomination period (including the names and genders of individuals who were nominated but did not accept)
- Notes about candidate speeches and discussion for each office nomination period
- Overall notes for each office nomination period as well as the entire meeting

To ensure that the observers were blind to the purposes of the original field experiment, they were told that this was a study on caucus proceedings generally and the instructions for observation and note taking included much beyond gender dynamics. If they were asked to explain their note-taking at the caucus meeting, they were able to accurately reply that they were taking notes on the caucus meeting for a school project. After they attended the caucus meetings, observers entered their notes into an online form that mirrored their instructions for observation and note taking. They were given 24 hours to enter the data, with most of them entering data the night of the caucus meeting. Observers attended the neighborhood meetings in teams of two, and levels of agreement between the trained observers were very high. For example, the observers agreed on the gender of the candidates in 99 percent of cases and they agreed on whether or not the candidate made a speech 95.5 percent of the time.

A small number of volunteer observers were also registered Republicans from the area who wanted to both participate in the observation exercise but also attend and participate in their own precinct caucus meeting. We invited these students to observe and participate at their own caucus meetings, none of which happened to be from our random sample of precincts. Because those locations were not part of the random sample and because we were not confident that observes could faithfully participate in in the meeting and simultaneously provide careful and objective notes, we have excluded these precincts from the final data.

## B.5.2 Coders

An additional benefit of eliminating observers who attended their own caucus meetings from the dataset is that we had 20 additional precincts that, while not usable for our analysis, were perfectly suitable as a training data set for for the coders. We had each trained coder first code the entire training data and then we carefully review their initial coding efforts for intercoder reliability. We identified differences and resolved questions before proceeding to the random data set.

To formally assess intercoder reliability among the coders, 10 percent of the 127 randomly selected precincts were double coded, and intercoder reliability (ICR) results for the main topic areas included in this analysis - whether the speaker mentioned his or her qualifications, ideology, political issues, the party platform, gender, the neighborhood, or home and family - meet or exceed standard thresholds of reliability (see Table A15).

Table A15: Intercoder Reliability Test Results

|  | Percent <br> Agreement | Krippendorff's <br> Alpha |
| :--- | :---: | :---: |
| Qualifications | 86.73 | 0.73 |
| Ideological References | 89.80 | 0.79 |
| Issues | 86.73 | 0.74 |
| Party Platform | 97.45 | 0.92 |
| Gender Appeal | 91.33 | 0.73 |
| Neighborhood | 93.37 | 0.85 |
| Family | 96.43 | 0.90 |

[^1]In terms of the content of topics analyzed as part of intercoder reliability tests and in the body of the
paper, family references included discussion of the candidate's role in the family (father, mother, parent, grandparent, provider, homemaker, etc.). References to gender included an appeal to gender as a reason for election or a discussion of the gender imbalance in state or national politics. It could also include reference to gendered associations, such as the Republican Women's Association, or overt references to self as a man or woman.

## C Conflicts of Interest and Funding

One of the authors previously consulted for the party under the administration of a different party chair. There were no ongoing ties during this project. We declare no conflicts of interest that would compromise or appear to compromise professional judgment or integrity in the conduct or reporting of research. All research funding came in the form of internal grants from Brigham Young University.

## References

Ansolabehere, Stephen, and Nathan Persily. 2008. "Vote Fraud in the Eye of the Beholder: The Role of Public Opinion in the Challenge to Voter Identification Requirements." Harvard Law Review 121: 1737-1774.

Jackman, Simon, and Lynn Vavreck. 2010. "Primary Politics: Race, Gender, and Age in the 2008 Democratic Primary." Journal of Elections, Public Opinion and Parties 20(2): 153-186.

Vavreck, Lynn, and Douglas Rivers. 2008. "The 2006 Cooperative Congressional Election Study." Journal of Elections, Public Opinion and Parties 18(4): 355-366.


[^0]:    Note: For CCES Modules respondents, results are limited to those who self-reported participation in a primary or caucus and who indicated they would participate in a Republican primary if given the opportunity. The sample of GOP Primary Voters was collected by YouGov in 2015 and includes validated voters who partipated in a Republican caucus in 2012 or 2014. Details of the Caucus Activist sample are included in the text. The Caucus Activist survey asked respondents whether they were "strong" conservatives, while the samples collected by YouGov were asked whether they were "very" conservative.

[^1]:    Note: N=196 cases and 392 decisions. Alpha reliability results of above 0.7 are typically considered good or very good and results above 0.8 are excellent (Hayes and Krippendorff 2007).

