Supporting Information for:

He Said, She Said: The Gender Double Bind in Legislator-Constituent Communication

Table of Contents

1 Descriptive Statistics of Respondent Samples

Table A1: Descriptive Demographic Statistics of Respondent Samples

	Study 1 (%)	Study 2 (%)
Female	57.6	54.0
Male	42.4	46.0
Democrat (incl. leaners)	49.5	46.5
Republican (incl. leaners)	31.1	31.7
Independent	15.8	18.1
White	68.0	70.4
Black	12.5	11.4
Hispanic	11.3	11.1
Asian	3.4	2.2
Native American	1.1	1.0
Mixed	2.3	2.1
Other race	1.4	1.8
N	1,000	1,000

2 Evaluations of Quality, Friendliness, Helpfulness

Table A2: Descriptive Statistics of Quality, Friendliness, and Helpfulness

	Study 1		**Study 2**	
	Mean (s.d.)	Median	Mean (s.d.)	Median
Overall Quality	52.5 (25.46)	51	50.9 (26.9)	51
Friendliness	50.74 (25.62)	51	50.4 (27.5)	50
Helpfulness	58.23 (26.6)	58	58.3 (28.1)	59

Note: Variables were measured on a 0-100 point scale with 0 labeled "Terrible" and 100 labeled "Excellent."

Figure A1: Distribution of Dependent Variables

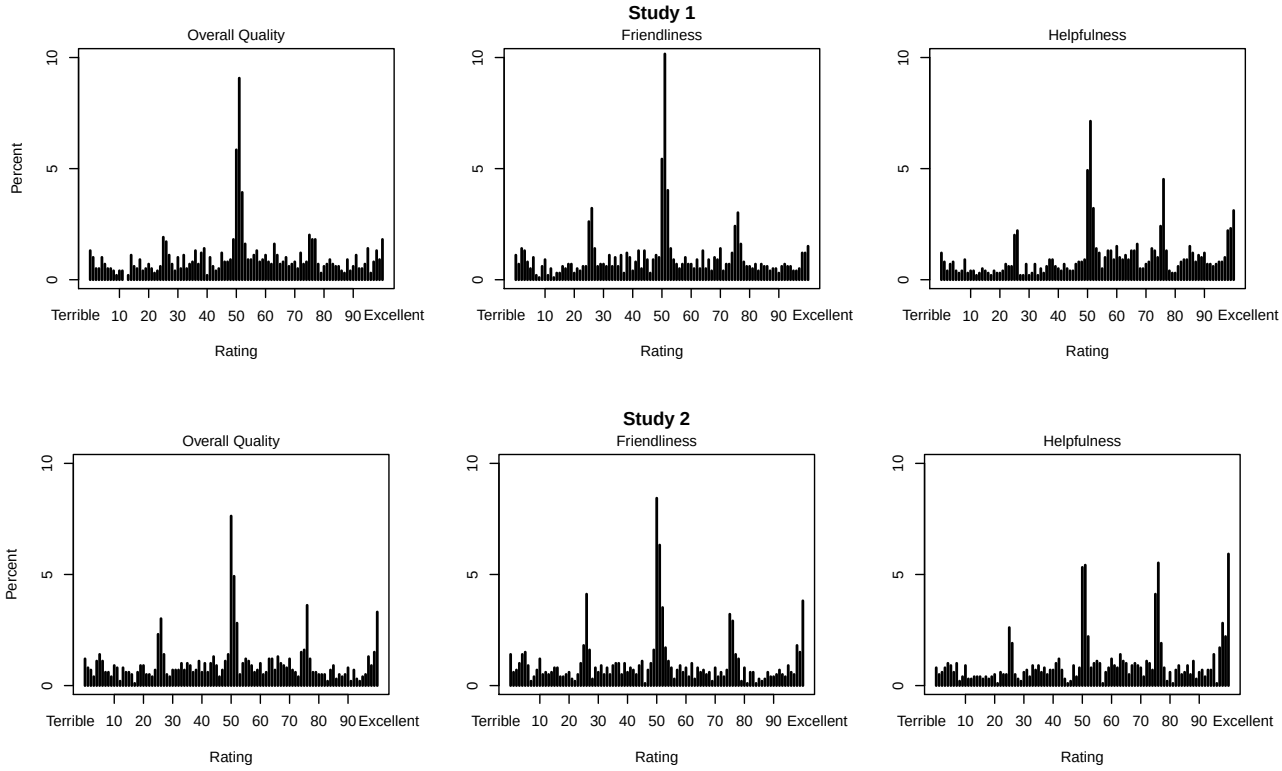


Figure A2: Mean Evaluations: Study 1

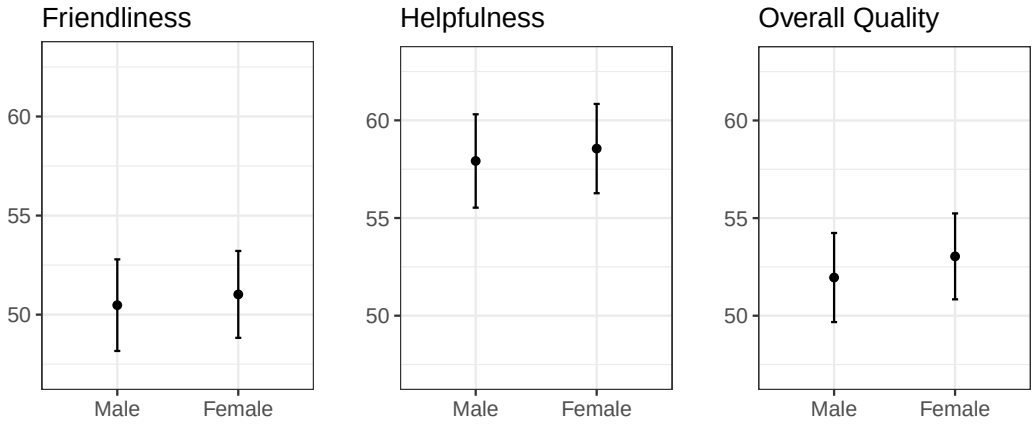
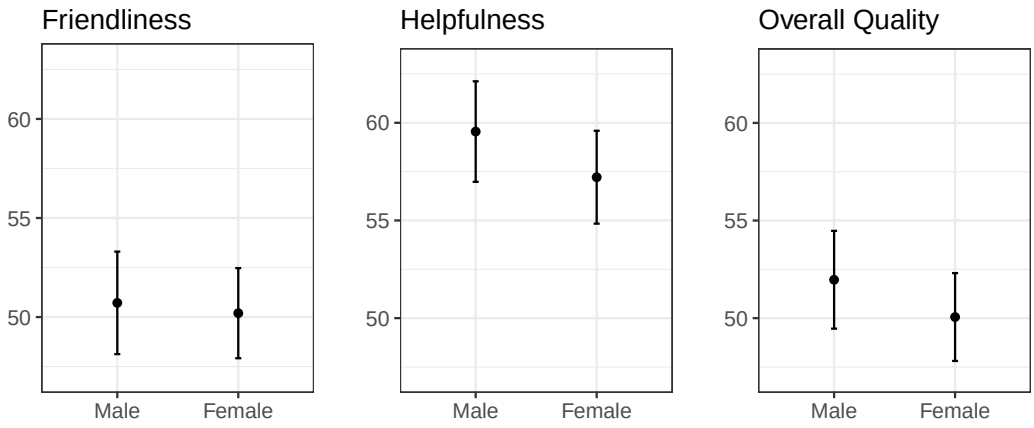


Figure A3: Mean Evaluations: Study 2



Note: Plots show the mean evaluations by gender condition, with vertical lines representing 95% confidence intervals.

3 Vignette Emails

The following images are the emails shown to respondents in the first experiment. For the second experiment, the images were the same except in the "friendly" conditions, the constituents name was changed to "Jane."

Answer

From: Representative Mary Johnson <MJohnson@malegislature.gov>
Subject: Re: Question on Voting

You must first register to vote. Once you are registered, you will have to provide an acceptable form of identification at the time of voting. I suggest checking our website (https://malegislature.gov) for more information about the voter registration process.

- Rep. Mary Johnson

Friendly Answer

From: Representative Mary Johnson <MJohnson@malegislature.gov>
Subject: Re: Question on Voting

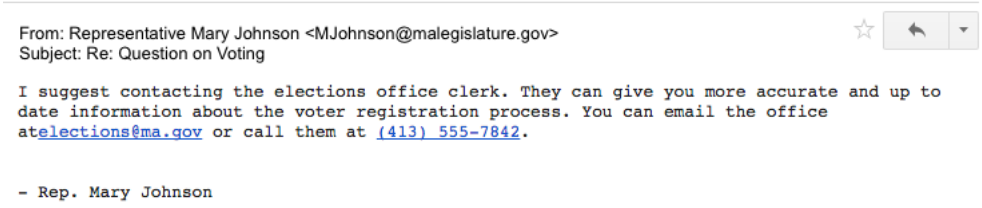
Dear Jake,

You must first register to vote. Once you are registered, you will have to provide an acceptable form of identification at the time of voting. I suggest checking our website (https://malegislature.gov) for more information about the voter registration process.

Let me know if you have additional questions.

- Rep. Mary Johnson

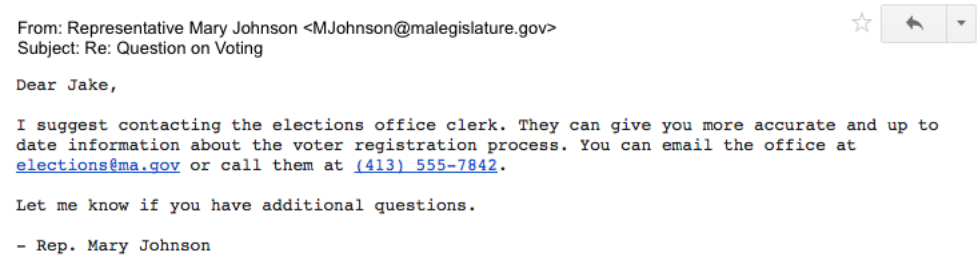
Contact


From: Representative Mary Johnson <MJohnson@malegislature.gov>
Subject: Re: Question on Voting

I suggest contacting the elections office clerk. They can give you more accurate and up to date information about the voter registration process. You can email the office atelections@ma.gov or call them at (413) 555-7842.

- Rep. Mary Johnson

Friendly Contact


From: Representative Mary Johnson <MJohnson@malegislature.gov>
Subject: Re: Question on Voting

Dear Jake,

I suggest contacting the elections office clerk. They can give you more accurate and up to date information about the voter registration process. You can email the office at elections@ma.gov or call them at (413) 555-7842.

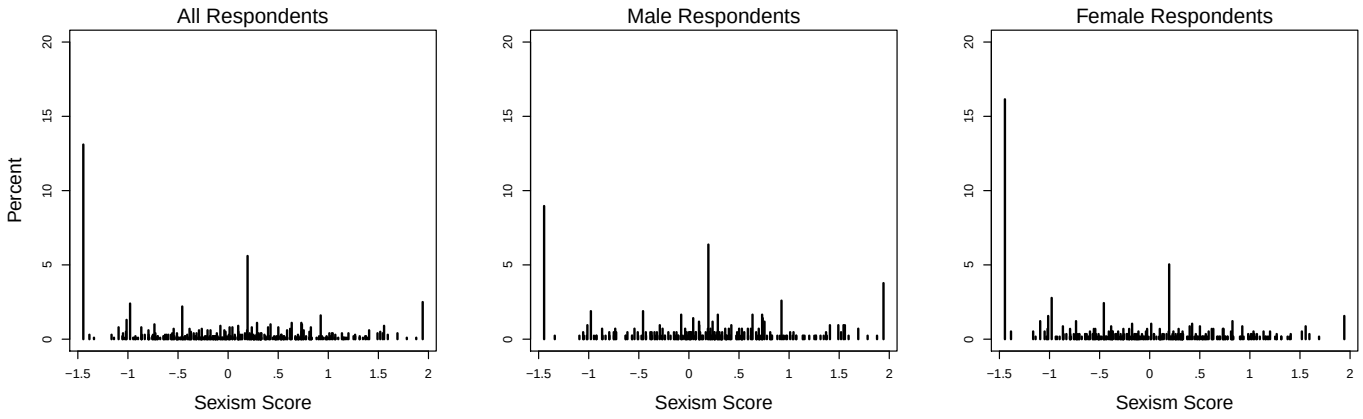
Let me know if you have additional questions.

- Rep. Mary Johnson

4 Distribution of Sexism Score

Figure A4 shows the distribution of the sexism standardized score for all respondents, and for men and woman separately. About 13 percent of respondents take the least sexist position on the four items. The remaining 87 percent of respondents are distributed fairly evenly across the scale. The distribution looks similar when I separate the distributions by gender of the respondent, though fewer men than women hold the least sexist views. About 9 percent of men, compared to 16 percent of women, have the lowest sexism score.

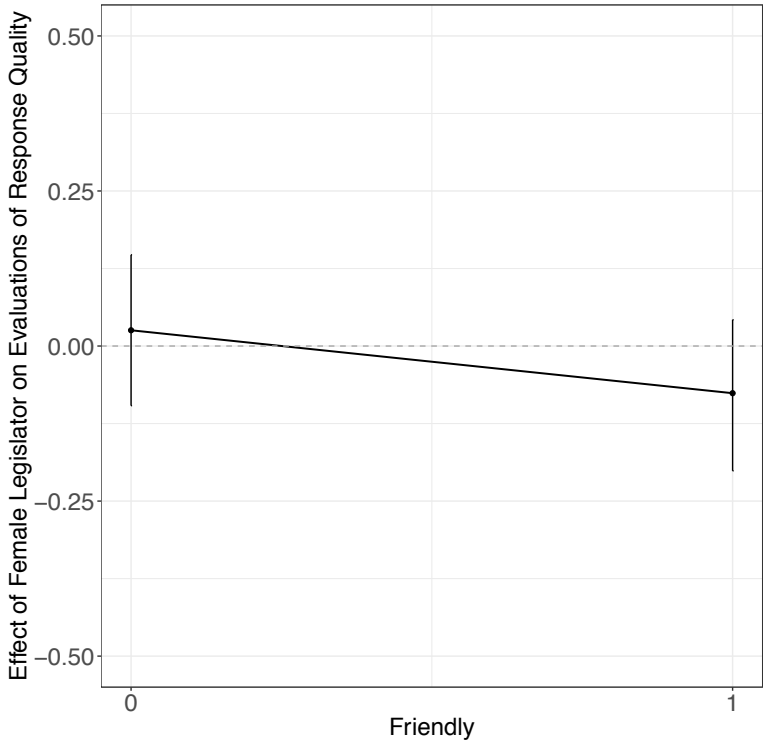
Figure A4: Distribution of Sexism Scores



5 Figures for Effect of Female Legislator, Conditional on Friendliness & Content

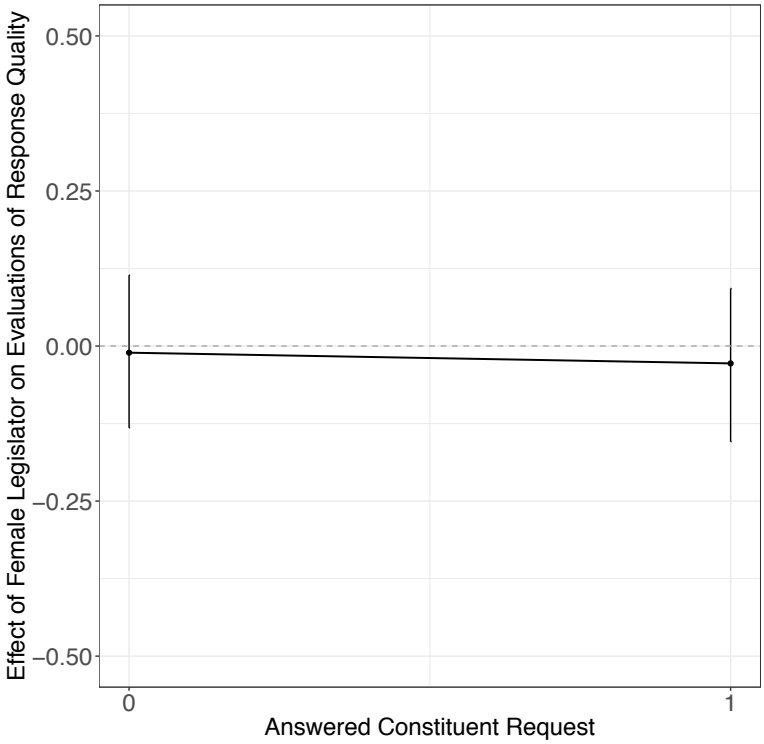
In the main paper, I show figures for the marginal effect of female legislator, across days until response and values of respondent sexism. The interactions between female legislator and friendliness or whether it contained an answer vs. referral were not statistically significant, but for reference, I include visualizations for those relationships here in Figures A5 and A6.

Figure A5: Effect of Female Legislator on Evaluations of Response Quality Conditional on Friendliness of Response



Note: Vertical bars represent 95% confidence interval.

Figure A6: Effect of Female Legislator on Evaluations of Response Quality Conditional on Content of Response



Note: Vertical bars represent 95% confidence interval.

6 Gender of Respondent

Little research has examined whether gender stereotypes affect legislator evaluations by both men and women. After all, men and women may not hold symmetrical gendered expectations in the first place and, if they do, they may not both apply these expectations to their evaluations regarding legislative behavior. On the one hand, men have been found to endorse gender stereotypes more strongly than women (Glick and Fiske, 1996; Rudman and Glick, 2001). It is therefore possible that men penalize female legislators more than women do.

On the other hand, recent research has found that women view female legislators as being more competent, having more integrity, and being better representations than men in office. Men, in contrast, are unaffected by the gender of their legislator when evaluating them (Costa and Schaffner, 2017). In addition, since women are more sensitive to political misconduct than men and view women as more trustworthy and honest, women punish female politicians for corruption more than they punish comparable corrupt behavior by male politicians (Eggers, Vivyan and Wagner, 2018). Therefore, *women* may be more likely to hold female legislators to higher standards than male legislators.

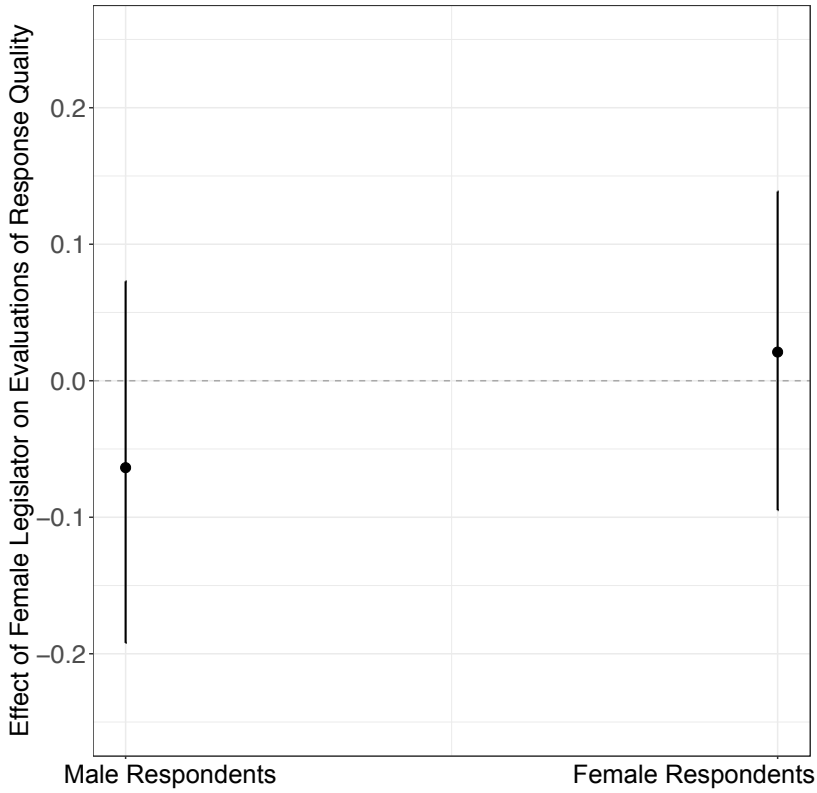
Since these possibilities involve men and women's respective views about women, I focus on the more direct measure in the main text (i.e. sexist attitudes). Nevertheless, in this section, I conduct subgroup analyses by the gender of respondent. Table A3 reproduces the analysis in the main text, but separate the effects based on the gender of the respondent. Figure A7 simply shows the independent effect of evaluating a response from the female legislators on response quality for both male and female respondents.

Table A3: Estimated Effects Conditional on Respondent Gender

	Dependent variable:	
	Response Quality Score	
	Women	Men
Female legislator	0.227	0.471*
	(0.154)	(0.174)
Greeting + Invite	0.298*	0.417*
	(0.084)	(0.094)
Answer	−0.043	0.039
	(0.084)	(0.094)
Days until response	−0.005	−0.002
	(0.005)	(0.005)
Female constituent (study 2)	−0.048	0.087
	(0.084)	(0.094)
Female legislator × Greeting + Invite	−0.019	−0.241
	(0.116)	(0.131)
Female legislator × Answer	−0.106	0.086
	(0.116)	(0.131)
Female legislator × Days until response	−0.009	−0.022*
	(0.007)	(0.008)
Female legislator × Female constituent	−0.0001	−0.229
	(0.116)	(0.132)
Constant	−0.051	−0.176
	(0.110)	(0.124)
Observations	1,112	876
R^2	0.036	0.056
Adjusted R^2	0.029	0.046

Note: Coefficients estimated using ordinary least squares regression. Standard errors in parentheses. * $p < 0.01$

Figure A7: Effect of Female Legislator on Evaluations of Response Quality by Respondent Gender



7 Past Email Contact with an Elected Official

Since past experience communicating with one's representative could shape one's perceptions of the email vignette, I included a question in the CCES module in study 1 asking respondents whether they have had past contact with an elected official. 361 respondents answered that they have written or emailed an elected official in the past; 631 said they have not written or emailed an elected official. Table A4 presents models separated by whether or not individuals have had such contact. While gender is not highly correlated with whether or not one has written their elected official in the past (-0.098), interpretation of these results should be done with caution since introducing an observational variable could confound the results.

Table A4: Estimated Effects Conditional on Past Email Contact with Elected Official

	Dependent variable:	
	Response Quality Score	
	Past contact	No past contact
Female legislator	0.202	0.309
	(0.232)	(0.187)
Friendly	0.489*	0.351*
	(0.140)	(0.104)
Answer	−0.117	0.054
	(0.140)	(0.104)
Days until response	−0.006	−0.007
	(0.008)	(0.006)
Female constituent (study 2)	−0.247	−0.068
	(0.195)	(0.149)
Female legislator × Friendly	0.265	−0.118
	(0.196)	(0.149)
Female legislator × Answer	−0.003	−0.016
	(0.011)	(0.009)
Female legislator × Days until response	−0.229	−0.001
	(0.167)	(0.132)
Observations	361	631
R^2	0.063	0.056
Adjusted R^2	0.044	0.046

Note: Coefficients estimated using ordinary least squares regression. Standard errors in parentheses. * $p < 0.01$

8 Party ID of Respondent

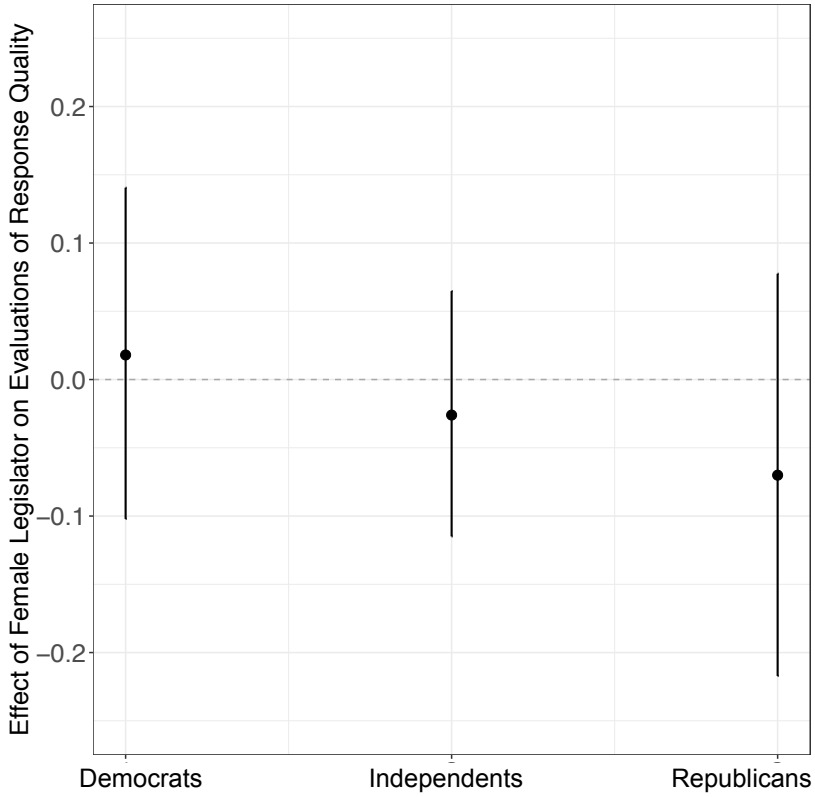
It is also possible that respondents infer the partisanship of the legislator from his/her putative gender. In this section, I check whether the results differ by partisanship. Specifically, Table A5 shows the main analysis separated by whether respondents identified as Democrats or Republicans (including leaners). The results for Democrats and Republicans do not markedly differ from one another nor from the results presented in the main text. The coefficient for female legislator for Democrats is statistically significant, suggesting that female legislators start "higher up" than male legislators when they both send timely responses. However, it is important to note that the female legislator coefficient for Republicans is not actually statistically distinguishable from the female coefficient coefficient for Democrats. Figure A8 shows the independent effect of evaluating a response from the female legislators on response quality for Democrats, true Independents, and Republicans. Legislator gender does not exert a statistically significant effect on evaluations for Democrats, suggesting that Democrats are not just likely to reward the female legislator for presumably sharing their partisan identification.

Table A5: Estimated Effects Conditional on Respondent Party ID

	Dependent variable:	
	Response Quality Score	
	Democrats	Republicans
Female legislator	0.506**	0.291
	(0.167)	(0.202)
Friendly	0.347**	0.380**
	(0.092)	(0.109)
Answer	−0.007	0.070
	(0.092)	(0.109)
Days until response	0.003	−0.008
	(0.005)	(0.006)
Female constituent *(study 2)*	−0.060	−0.015
	(0.092)	(0.109)
Female legislator × Friendly	−0.231	−0.038
	(0.129)	(0.151)
Female legislator × Answer	−0.134	0.107
	(0.129)	(0.151)
Female legislator × Days until response	−0.016*	−0.022*
	(0.007)	(0.009)
Female legislator × Female constituent	−0.093	−0.067
	(0.129)	(0.151)
Constant	−0.253	0.003
	(0.118)	(0.143)
Observations	955	625
R^2	0.030	0.079
Adjusted R^2	0.021	0.065

Note: Coefficients estimated using ordinary least squares regression. Standard errors in parentheses. ** $p < 0.01$, * $p < 0.05$

Figure A8: Effect of Female Legislator on Evaluations of Response Quality by Partisanship



9 Alternative Measurement of Sexism

In the main text, sexism is measured using a standardized score from an IRT graded response model of four hostile sexism items. The table below replicates the main results from Table 1, Model 3 with sexism instead measured as the mean of respondents' answers on the sexism battery. The magnitude and the statistical significance of the results are robust across both ways of measuring sexism.

Table A6: Table 1, Model 3 Reproduced Measuring Sexism as a Mean

	Dependent variable:
	Response Quality Score
Female legislator	0.680*
	(0.203)
Friendly	0.441*
	(0.085)
Answer	−0.021
	(0.085)
Days until response	−0.007
	(0.005)
Sexism	0.209*
	(0.039)
Female legislator × Friendly	−0.149
	(0.120)
Female legislator × Answer	0.012
	(0.120)
Female legislator × Days until response	−0.012
	(0.007)
Female legislator × Sexism	−0.151*
	(0.054)
Constant	−0.656*
	(0.150)
Observations	941
R^2	0.087
Adjusted R^2	0.078
Note:	*p<0.01; **p<[0.**]; ***p<[0.***]

10 Marginal Effect of Response Traits Across Sexism: Kernel Smoothing Estimator

In the body of the paper, I use the binning method outlined by (Hainmueller, Mummolo and Xu, 2019) because it allows me to estimate the marginal effects of the response tone, content, and timeliness on evaluations across low, medium, and high values of sexism. However, to

further justify this approach, in this section I reproduce Figures 3-5 from the main text using the kernel estimator instead. This approach allows me to estimate the non-linear functional form of the marginal effect of the response traits on evaluation across the values of sexism by estimating local effects with a semi-parametric reweighting scheme (Hainmueller, Mummolo and Xu, 2019). As seen in the figures below, using this approach does not aid in the interpretation of the results. The marginal effect of response traits is mostly linear across values of sexism, with differences often between the bottom and top tercile of sexism values, as depicted using the binning estimator in the main paper.

Figure A9: Marginal Effect of Days on Evaluations

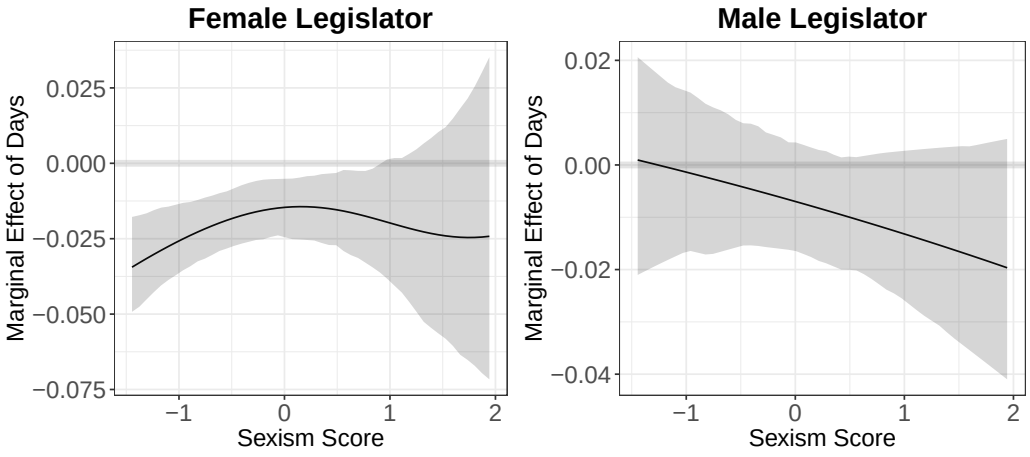


Figure A10: Marginal Effect of Friendliness on Evaluations

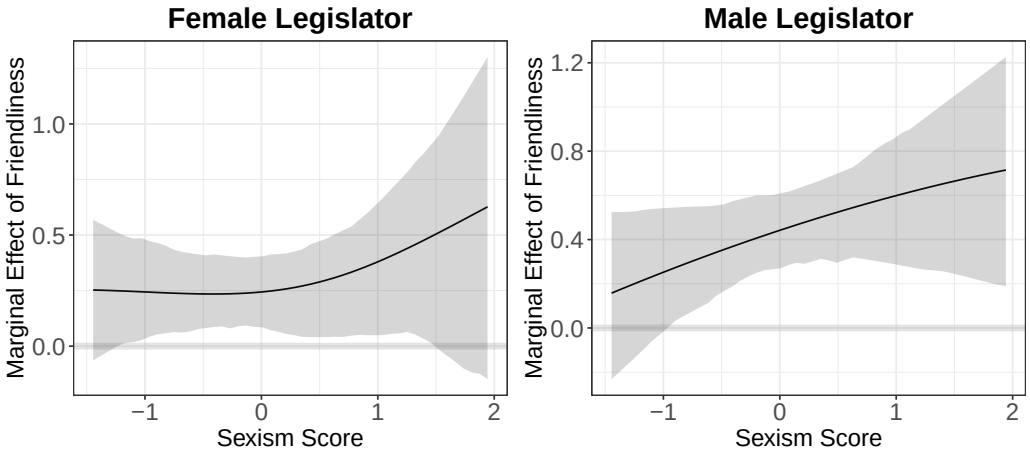
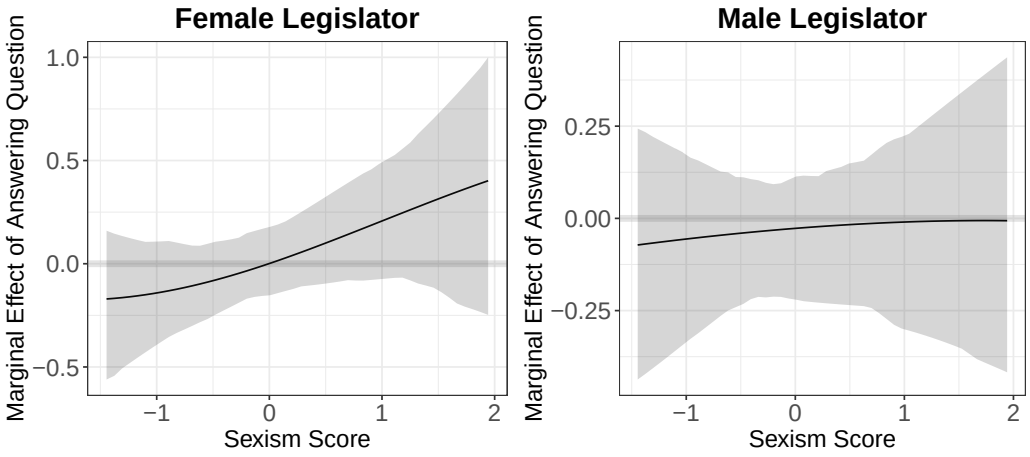


Figure A11: Marginal Effect of Answering Question on Evaluations



11 Three-way Interaction Models

Table A7 presents an OLS model with three-way interaction terms for gender of the legislator, respondent sexism, and the other response traits, visualized in Figures 3-5 in the main text. In the main paper, I use the binning estimator to jointly fit the interaction components to each tercile. The approach in the paper does not coerce the effects into a linear relationship, as does the model below.

Table A7: Estimated Effects of Response Traits on Evaluations of Response Quality

	Dependent variable:
	Response Quality Score
Female legislator	0.265
	(0.145)
Friendly	0.430**
	(0.083)
Answer	−0.009
	(0.083)
Days	−0.006
	(0.005)
Sexism	0.230*
	(0.116)
Female legislator × Friendly	−0.154
	(0.118)
Female legislator × Answer	0.023
	(0.117)
Female legislator × Days	−0.012
	(0.007)
Female legislator × Sexism	−0.366*
	(0.165)
Friendly × Sexism	0.164
	(0.095)
Answer × Sexism	0.011
	(0.096)
Days × Sexism	−0.005
	(0.005)
Female legislator × Sexism	−0.101
× Friendly	(0.135)
Female legislator × Sexism	0.170
× Answer	(0.135)
Female legislator × Sexism	0.010
× Days	(0.007)
Constant	−0.096
	(0.102)
Observations	992
R^2	0.085
Adjusted R^2	0.071

Note: Coefficients estimated using ordinary least squares regression. Standard errors in parentheses. $**p < 0.01$, $* p < 0.05$

References

Costa, Mia and Brian F Schaffner. 2017. "How Gender Conditions the Way Citizens Evaluate and Engage with Their Representatives." *Political Research Quarterly* 71(1):46–58.

Eggers, Andrew C, Nick Vivyan and Markus Wagner. 2018. "Corruption, accountability, and gender: do female politicians face higher standards in public life?" *The Journal of Politics* 80(1):321–326.

Glick, Peter and Susan T Fiske. 1996. "The ambivalent sexism inventory: Differentiating hostile and benevolent sexism." *Journal of personality and social psychology* 70(3):491.

Hainmueller, Jens, Jonathan Mummolo and Yiqing Xu. 2019. "How Much Should We Trust Estimates from Multiplicative Interaction Models? Simple Tools to Improve Empirical Practice." *Political Analysis* 27(2):163–192.

Rudman, Laurie A and Peter Glick. 2001. "Prescriptive gender stereotypes and backlash toward agentic women." *Journal of social issues* 57(4):743–762.