Online Appendix to "Multidimensional Responsiveness: The Determinants of Legislators' Representational Priorities"

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February 9, 2013

1 Survey Instrument

The complete text of the survey experiments is given below. Respondents viewed the constituent e-mail experiment first, then the list experiment.

1.1 Constituent E-mail Experiment

All respondents viewed the introductory text first, then were randomly presented with three messages: one each about policy, service, and allocation. The constituent's name was also randomized to signal gender and race (white, black, Latino/a). Recall that the data presented in the main text include only the first treatment message each respondent viewed. I report results from this between-subjects design rather than the within-subjects design to avoid problems from respondents learning the aim of the study as they viewed and responded to the three messages in succession. It seems that such learning occurred because many respondents' priority ratings over the three messages were quite similar—the median standard deviation of the within-subject priority ratings is 10. This is consistent with a respondent understanding that he or she is being evaluated on different types of responsiveness and choosing similar values so as not to divulge his or her true priorities.

Introductory Text

> You will now see a series of three e-mail messages sent to you from hypothetical constituents. In each one, first read the message. Then answer two questions about each one. First, evaluate the priority level you or your office would give this e-mail if it were sent to you today. Select your evaluation by clicking on a number on the "priority scale" under the message. This measure ranges from 0 to 100, with 0 indicating lowest priority and 100 indicating highest priority. If you would give the message average priority, select the score 50. Second, evaluate how likely you would be able to satisfy the constituent.

Policy Treatment

- Male names: Connor Fredericks, Tyrone Baker, Juan Lopez

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- Female names: Molly Wollsteiner, Shanice Jackson, Camila Garcia

Dear Legislator, My name is [Name] and I want to ask you about public education in our state. I've been hearing how teachers might only get raises if their students get good test scores. Won't that just make teachers afraid to teach in poor schools? What do you think about this, and how do you see it affecting our state? Thanks, [Name]

Service Treatment

- Male names: Jacob Nichols, DeAndre Moore, Antonio Ruiz
- Female names: Amy Schneider, Tasheka Robinson, Gabriela Mendez

Dear Legislator, My name is [Name] and I am having some problems getting a driver's license. The people at the driver's license office say I can't prove I am a resident of the state, but that's not true! I am a resident of the state! I am really tired of dealing with this. Is there anything you can do for me? Thanks, [Name]

Allocation Treatment

- Male names: Luke Jacobsen, Terrell Washington, Eduardo Diaz
- Female names: Claire Neilsson, Denisha Jones, Marina Gutierrez

Dear Legislator, My name is [Name] and I am concerned about whether our district will be getting any money for road repair this year. I am so tired of all the potholes! Will we be getting any state money, or maybe some Federal stimulus money? I know you have to drive on these roads too! Thanks, [Name]

After reading the e-mail, respondents answered the following two questions:

(1) What priority level would you give this e-mail? You may choose any number from 0 to 100. 0 = Lowest priority; 50 = Average priority; 100 = Highest priority

[0–100 Slide Bar]

(2) Based only on the information given in the e-mail, how likely is it that you could satisfy this constituent?

◦ Very Unlikely

◦ Unlikely
◦ Somewhat Unlikely
◦ Somewhat Likely
◦ Likely
◦ Very Likely

1.1.1 Experimental Design

The table below summarizes the randomization of respondents to treatment conditions in the first message viewed in the constituent e-mail experiment. Several balance checks (not shown) confirmed no systematic patterns in treatment assignments due to several respondent traits.

Constituent gender/race...	**Policy E-mail**	**Service E-mail**	**Allocation E-mail**
White Male	n = 42	n = 55	n = 64
Black Male	n = 56	n = 69	n = 61
Latino Male	n = 45	n = 59	n = 59
White Female	n = 69	n = 51	n = 76
Black Female	n = 55	n = 61	n = 67
Latina Female	n = 57	n = 53	n = 48

1.2 List Experiment

All respondents viewed the introductory text first, then were randomly assigned to the control or treatment group.

Introductory Text

> Next you will see a list of some activities that occupy political representatives as part of their job. Think about HOW MANY of these items are important to you as a legislator (or to the legislator you work for). You will not need to say which ones, just how many.

1.2.1 Control Group

The control group (n = 583) saw the five non-sensitive items in random order:

(1) Learning about constituents' opinions in order to better represent their views.
(2) Helping constituents who have personal problems with government agencies.
(3) Making sure the district gets its fair share of government money and projects.
(4) Preparing to run for higher office, such as Governor or the U.S. Congress.
(5) Representing the views of interest groups.

1.2.2 Treatment Group

The treatment group (n = 516) saw the same non-sensitive items as the control group as well as the the sensitive item, all in random order:

Table A.1: Sample versus Population Comparisons on Key Respondent Variables

Variable	Sample Proportion	Population Proportion	Difference
Republican	0.52	0.54	-0.02
Lower Chamber	0.76	0.73	$+0.03^{*}$
Female	0.29	0.23	$+0.06^{*}$
Black	0.05	0.09	-0.04^{*}
Latino/a	0.02	0.03	-0.01^{*}

Note: Cell entries report sample and population proportions of each variable and the differences between the two. * Sample proportion is statistically significantly different from the population proportion ($p < 0.05$).

(1) Learning about constituents' opinions in order to better represent their views.
(2) Helping constituents who have personal problems with government agencies.
(3) Making sure the district gets its fair share of government money and projects.
(4) Preparing to run for higher office, such as Governor or the U.S. Congress.
(5) Representing the views of interest groups.
(6) Making sure that people who are of the same gender or race as you have their voices heard in government.

2 Sample Characteristics

Here I provide a detailed look at the representativeness of the sample, including a comparison to the population proportions of chamber and party membership, gender, and race as well as full state-level response rates.

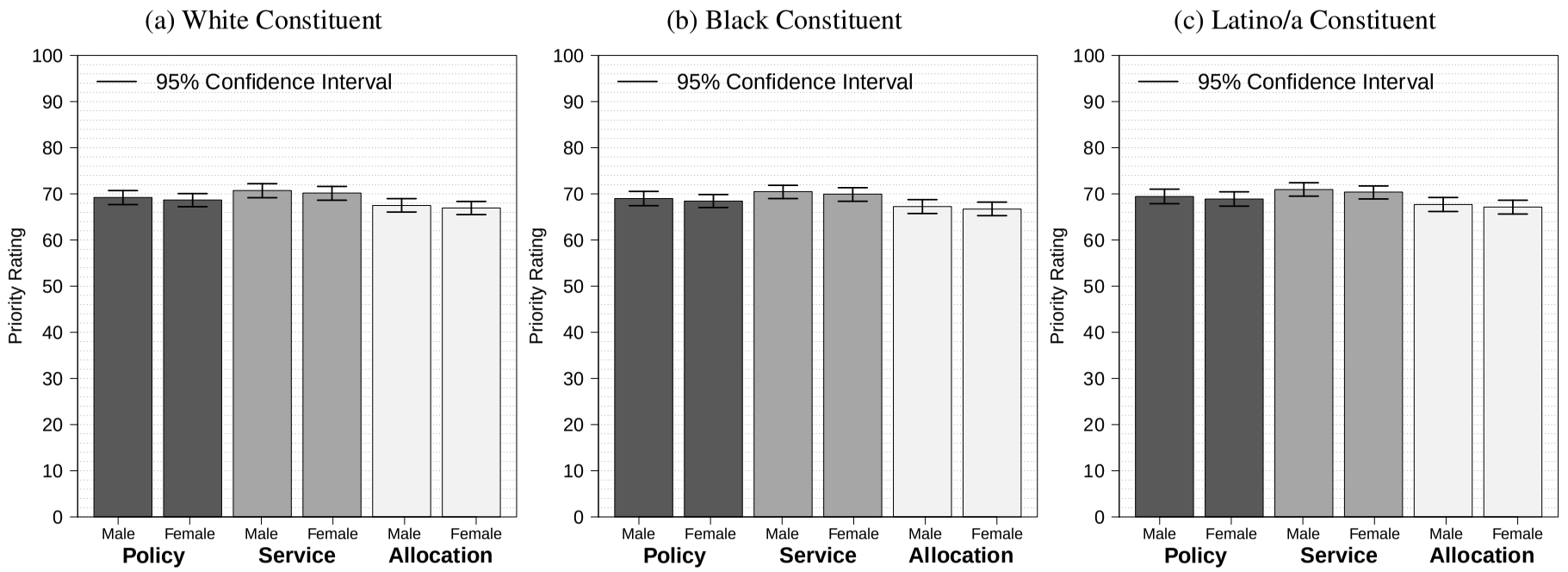
2.1 Sample versus Population Comparisons on Key Respondent Variables

Table A.1 compares sample proportions by party, gender, race, and chamber to proportions of those variables in the population of American state legislators in 2011. The sample is reasonably representative of the population of state legislators, though there was some underrepresentation of minorities. Women, Democrats, and members of the lower chambers were slightly overrepresented compared to their respective population proportions, while blacks and Latinos were underrepresented.

3 Baseline Models

Figure A.1 displays the baseline treatment effects from the constituent e-mail experiment. In each graph the x-axis plots the experimental conditions and the y-axis plots the expected priority rating. Within each message treatment (policy, service, and allocation), results are given for the male and female constituent names. Panel (a) gives results for the white constituent names, panel (b) gives results for the black constituent names, and panel (c) gives results for the Latino/a constituent names. Solid lines indicate 95% confidence intervals.

Figure A.1: Baseline Treatment Effects in the Constituent E-mail Experiment



Note: The graphs present differences in priority ratings as a function of the treatments. In each graph the x-axis plots the experimental conditions and the y-axis plots the expected priority rating. Within each message treatment (policy, service, and allocation), results are given for the male and female constituent names. Panel (a) gives results for the white constituent names, panel (b) gives results for the black constituent names, and panel (c) gives results for the Latino/a constituent names. Solid lines indicate 95% confidence intervals.

The average priority rating in the constituent e-mail experiment is 68 with a standard deviation of 23. The graphs show that on average, legislators rated the service condition a higher priority than the policy condition and the policy condition slightly higher than the allocation condition. All three panels show very small differences in the average response to the different racial names. Furthermore, within each panel there are only small differences in priority ratings by the different constituent genders.

4 Full Model Results

Table A.2 presents complete model results from the constituent e-mail experiment. Columns titled "Main" represent models used to produce the figures seen in the main text. Columns titled "Controls" include controls for party, gender, and race. The final two columns show the full model with all main independent variables ("All Main") and all covariates ("Full"), respectively.

Figure A.2 shows the effects of legislator party, gender, and race on the average priority ratings. Results conform to predictions outlined in the main text. Panel (a) shows that Democrats rate the service and allocation conditions 6 and 4 points higher, on average, compared to the ratings of Republicans ($p < 0.05$). Female legislators' average rating of the allocation condition is 7 points higher than the average rating of male legislators ($p < 0.05$), though there is virtually no difference in the service condition. Finally, black legislators rate the service and allocation conditions significantly higher than do white legislators, on average (8 and 9 points, $p < 0.05$), and black legislators' average ratings of the service and allocation conditions are significantly higher than their average rating of the policy condition (12 and 11 points, $p < 0.05$).

5 List Experiment Difference-in-Means Results

Table A.3 presents difference-in-means results from the list experiment: the mean number of items as well as differences in means between treatment and control by gender and race.

6 Variable Descriptions and Summary Statistics

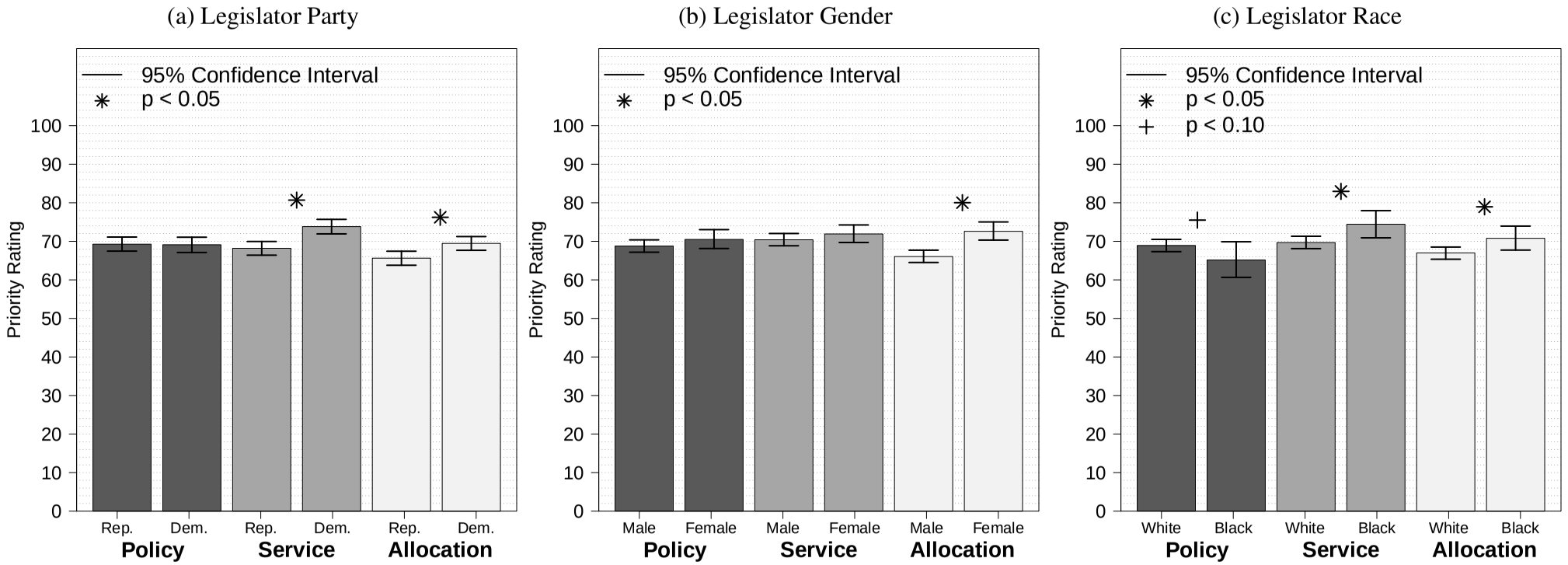
Table A.4 presents variable descriptions and summary statistics and Table A.5 reports pairwise correlations between the independent variables.

Table A.2: Complete Results from the Constituent E-mail Experiment

Models:	**Professionalism**		**Magnitude**		**Income**		**% Black**		**Competition**		**Ambition**		**Satisfy**		**All Main**	**Full**
Variables	Main	Controls	Main	Controls	Main	Controls	Main	Controls	Main	Controls	Main	Controls	Main	Controls		
Intercept	66.84*	66.88*	71.07*	69.83*	63.28*	64.50*	69.66*	68.12*	67.10*	66.49*	68.92*	67.35*	43.20*	35.17*	26.71*	26.88*
	(1.31)	(1.57)	(1.05)	(1.31)	(7.52)	(8.12)	(0.85)	(1.22)	(2.22)	(2.43)	(0.83)	(1.13)	(1.74)	(2.06)	(8.01)	(8.00)
Service Treatment	−4.28*	−2.58	3.12*	5.79*	37.95*	28.61*	−1.05	1.62	−3.36	1.01	1.65*	5.32*	−14.59*	−6.71*	−7.24	−3.73
	(1.34)	(1.78)	(1.06)	(1.50)	(10.16)	(11.00)	(0.82)	(1.40)	(2.83)	(3.15)	(0.73)	(1.30)	(2.20)	(2.59)	(10.87)	(10.90)
Allocation Treatment	−2.39	−3.95*	−4.51*	−4.31*	−3.67	−14.38	−2.69*	−2.14	1.86	2.14	−1.27	−1.98	0.13	6.04*	9.10	3.70
	(1.34)	(1.84)	(1.07)	(1.52)	(9.80)	(10.64)	(0.80)	(1.42)	(2.79)	(3.07)	(0.71)	(1.31)	(2.16)	(2.54)	(10.55)	(10.58)
Female Constituent	−0.57	−0.63	−0.79	−0.87	−0.71	−0.79	−0.63	−0.72	−0.48	−0.58	−0.13	−0.11	−0.73	−0.66	−0.37	−0.27
	(0.56)	(0.57)	(0.56)	(0.57)	(0.56)	(0.57)	(0.56)	(0.57)	(0.56)	(0.57)	(0.58)	(0.59)	(0.50)	(0.51)	(0.54)	(0.54)
Black Constituent	−0.11	0.05	−0.12	0.03	−0.31	−0.10	−0.43	0.09	−0.20	−0.01	−0.30	−0.24	−1.21*	−0.80	−0.99	−0.57
	(0.67)	(0.69)	(0.67)	(0.69)	(0.67)	(0.69)	(0.67)	(0.69)	(0.67)	(0.69)	(0.69)	(0.71)	(0.61)	(0.62)	(0.64)	(0.64)
Latino/a Constituent	0.37	0.65	0.43	0.70	0.29	0.58	0.01	0.50	0.25	0.52	0.09	0.42	−0.03	0.57	0.15	0.53
	(0.70)	(0.72)	(0.70)	(0.72)	(0.70)	(0.72)	(0.70)	(0.72)	(0.70)	(0.72)	(0.72)	(0.74)	(0.63)	(0.64)	(0.67)	(0.67)
Professionalism	1.34*	0.72													−1.73*	−1.45*
	(0.67)	(0.69)													(0.58)	(0.58)
Service × Pro.	3.97*	4.29*													5.54*	5.21*
	(0.77)	(0.80)													(0.78)	(0.79)
Allocation × Pro.	0.44	1.12													2.62*	2.38*
	(0.75)	(0.78)													(0.75)	(0.76)
Republican Legislator		−0.11		0.19		0.11		0.18		0.19		0.56		4.21*		3.52*
		(1.09)		(1.08)		(1.12)		(1.12)		(1.09)		(1.11)		(0.99)		(1.07)
Female Legislator		1.84		1.59		1.82		1.82		1.89		3.53*		2.51*		3.35*
		(1.23)		(1.23)		(1.23)		(1.23)		(1.23)		(1.24)		(1.11)		(1.12)
Black Legislator		−3.67		−3.73		−3.67		−3.55		−4.20		−3.59		−4.53*		−5.88*
		(2.36)		(2.36)		(2.40)		(2.81)		(2.41)		(2.36)		(2.11)		(2.54)
Service × Republican		−3.96*		−4.64*		−4.70*		−3.85*		−4.98*		−5.76*		−5.26*		−4.15*
		(1.51)		(1.51)		(1.53)		(1.54)		(1.51)		(1.55)		(1.37)		(1.46)
Allocation ×Republican		−0.90		−1.34		−1.31		−1.25		−1.19		−0.33		−4.71*		−2.63
		(1.53)		(1.51)		(1.53)		(1.55)		(1.52)		(1.55)		(1.37)		(1.48)
Service × Female		−1.90		−2.08		−1.55		−1.76		−1.63		−3.85*		−3.20*		−5.15*
		(1.72)		(1.72)		(1.72)		(1.72)		(1.72)		(1.76)		(1.54)		(1.59)
Allocation × Female		4.60*		4.55*		4.77*		4.45*		4.58*		3.40		4.70*		3.54*
		(1.72)		(1.73)		(1.73)		(1.72)		(1.73)		(1.75)		(1.55)		(1.59)
Service × Black		5.38		4.70		3.73		−6.69		4.36		2.38		3.08		−3.36
		(3.02)		(3.02)		(3.10)		(3.84)		(3.12)		(3.08)		(2.69)		(3.54)
Allocation × Black		5.77*		5.89*		6.91*		5.53		6.86*		5.95*		3.80		3.32
		(2.92)		(2.92)		(3.00)		(4.07)		(3.01)		(3.00)		(2.62)		(3.86)
District Magnitude			−1.36*	−1.19*											−0.69	−0.49
			(0.47)	(0.47)											(0.44)	(0.44)
Service × Magnitude			−0.89	−0.91											−0.50	−0.74
			(0.52)	(0.53)											(0.52)	(0.52)
Allocation × Magnitude			1.95*	1.59*											1.62*	1.21*
			(0.56)	(0.57)											(0.56)	(0.56)
District Median Income					0.01	0.00									0.01	0.00
					(0.01)	(0.01)									(0.01)	(0.01)
Service × Income					−0.03*	−0.02*									−0.00	0.00
					(0.01)	(0.01)									(0.01)	(0.01)
Allocation × Income					0.00	0.01									−0.01	0.00
					(0.01)	(0.01)									(0.01)	(0.01)
District % Blakc							−0.04	−0.00							−0.04	0.03
							(0.04)	(0.05)							(0.03)	(0.04)
Service × % Black							0.24*	0.29*							0.09	0.12*
							(0.04)	(0.06)							(0.05)	(0.06)
Allocation × % Black							0.09*	0.01							0.11*	0.06
							(0.04)	(0.06)							(0.04)	(0.06)
Electoral Competition									−0.03	−0.02					−0.08*	−0.09*
									(0.03)	(0.03)					(0.03)	(0.03)
Service × Comp.									−0.07	−0.05					0.13*	0.13*
									(0.04)	(0.04)					(0.04)	(0.04)
Allocation × Comp.									0.05	0.06					0.06	0.07
									(0.04)	(0.04)					(0.04)	(0.04)
Ambition											−5.56*	−5.23			−1.08	−1.51
											(2.81)	(2.84)			(2.56)	(2.56)
Service × Ambition											−0.55	1.04			−0.24	−0.04
											(4.23)	(4.27)			(3.86)	(3.86)
Allocation × Ambition											11.28*	9.79			0.72	−0.32
											(5.66)	(5.71)			(5.17)	(5.18)
Satisfy													6.56*	7.64*	7.51*	7.81*
													(0.40)	(0.42)	(0.44)	(0.45)
Service × Satisfy													3.44*	2.40*	2.24*	1.86*
													(0.51)	(0.54)	(0.56)	(0.57)
Allocation × Satisfy													−0.13	−1.08	−1.04	−1.27*
													(0.53)	(0.55)	(0.57)	(0.58)
BIC	11481.15	11194.39	11484.39	11198.82	11515.46	11228.90	11500.83	11213.49	11508.10	11221.36	10738.01	10462.36	11207.73	10916.14	10344.84	10354.63
N	1047	1020	1047	1020	1047	1020	1047	1020	1047	1020	981	955	1042	1015	953	953
States	46	45	46	45	46	45	46	45	46	45	46	45	46	45	45	45

Note: Cell entries report linear MLM coefficients and standard errors (in parentheses) from the constituent e-mail experiment. The dependent variable in all columns is the priority rating of the e-mail. Columns titled "Main" represent models used to produce the figures seen in the main text. Columns titled "Controls" include controls for party, gender, and race and do not include Latino/a legislators or legislators from Nebraska. The final two columns show the full model with all main independent variables ("All Main") and all covariates ("Full"), respectively. Lower Bayesian Information Criterion (BIC) values indicate better model fit. Data are weighted via raking to reflect state legislator population marginals on partisanship, chamber, gender, and race. * $p < 0.05$ (two-tailed).

Figure A.2: Effects of Individual-Level Factors in the Constituent E-mail Experiment



Note: The graphs present the average priority rating in each experimental condition for Republican versus Democratic legislators (panel a), male versus female legislators (panel b), and white versus black legislators (panel c). * Difference between two same-shaded bars is statistically significant at $p < 0.05$ (two-tailed).

Table A.3: List Experiment Difference-in-Means Tests by Gender and Race

	Treatment	Control	Difference
All Men	3.42	3.05	0.36*
All Women	3.62	3.36	0.26*
All Whites	3.42	3.11	0.31*
All Blacks	4.45	3.45	0.99*

Note: Cell entries report treatment and control group means and differences. The control group viewed a list of five non-sensitive items. The treatment group viewed a list with six items: the same five non-sensitive items as the control group as well as the sensitive item. * $p < 0.05$ (two-tailed).

Table A.4: Chapter 5 Variable Descriptions and Summary Statistics

Variable	Description	Mean	SD
Professionalism (scaled by district size)	$100 \times \left(\frac{\text{Squire (2007) index}}{ln(\text{2005 district population})}\right)$	1.51	0.91
District Magnitude	Number of representatives in district (both chambers in states where districts match)	1.55	1.45
District Median Income (scaled by state median income)	$1000 \times \left(\frac{ln(\text{2000 district median income})}{ln(\text{2000 state median income})}\right)$	1053.25	73.64
District % Black	2000 data	8.90	15.12
Electoral Competition	Two-party vote share in last election	70.29	18.02
Ambition	Yes = 27; No = 1,067	–	–
Likelihood of Satisfying Request	Very unlikely–Very likely; 6-point scale	4.02	1.26
Party	Republican = 608; Democrat = 556; Non-partisan = 11	–	–
Gender	Male = 856; Female = 319	–	–
Race	White = 1,095; Black = 57; Latino/a = 23	–	–
Chamber	Upper = 286; Lower = 889	–	–
Seniority	Consecutive years served in legislature	5.97	6.29

Note: Cell entries report descriptions and summary statistics (mean and standard deviation) for the variables used in the analyses. Demographic data come from the 2000 U.S. Census unless otherwise noted.

Table A.5: Chapter 5 Variable Correlation Matrix

	Pro.	Magnitude	Income	% Black	Competition	Ambition	Satisfy	Rep.	Female	White	Black	Latino/a	L. Chamber
Pro.													
Magnitude	−0.28*												
Income	0.06	0.10*											
% Black	0.07*	−0.09*	−0.26*										
Competition	−0.13*	0.16*	0.08*	−0.23*									
Ambition	0.00	0.01	0.06	−0.01	−0.05								
Satisfy	0.10*	−0.05	−0.02	0.05	0.01	0.02							
Rep.	−0.14*	0.06*	0.18*	−0.29*	0.02	0.01	−0.14*						
Female	0.02	−0.03	−0.02	0.07*	0.00	0.02	0.02	−0.23*					
White	−0.07*	0.06*	0.24*	−0.58*	0.23*	0.02	−0.08*	0.23*	−0.12*				
Black	0.07*	−0.05	−0.24*	0.68*	−0.22*	−0.04	0.06	−0.22*	0.09*	−0.84*			
Latino/a	0.02	−0.04	−0.07*	0.00	−0.07*	0.02	0.05	−0.07*	0.07*	−0.52*	−0.03		
L. Chamber	−0.01	0.08*	0.04	−0.06*	0.06*	0.02	−0.04	0.06	0.03	0.04	−0.05	0.01	
Seniority	0.07*	−0.02	−0.01	0.14*	−0.26*	−0.03	0.05	−0.18*	0.06*	−0.05	0.06*	−0.01	−0.05

Note: Cell entries report pairwise correlations between the independent variables used in the analyses. * $p < 0.05$ (two-tailed).