Supporting Information for "Do Constituents Know (Or Care) About the Lawmaking Effectiveness of their Representatives?"

Supplemental Appendices – To Be Made Available Online

In the first appendix we present the predicted probabilities for both the control and treatment groups. In other words, the figures show the predicted probability (along with 95% confidence intervals) produced by logit models for the various dependent variables and samples. We present these results from the MTurk and CCES samples for the outcomes: approval (Figures A1-A3) and vote intention (Figures A4-A6).

The second appendix includes tables that contain the coefficients for each of the regression models underlying the results presented graphically in the main paper, as well as for a series of robustness tests.

The third appendix includes a description of the sample drawn from Amazon's Mechanical Turk.

Appendix 1: Predicted Probabilities across Samples

Impact of Treatment on Approval in the MTurk and CCES Samples

Figures A1-A3 correspond to the results in Figures 4-76in the main body of the paper. While Figures 4-6 present the treatment effects and associated confidence intervals, Figures A1-A3 show the predicted probability (along with 95% confidence intervals) for both the treatment and control groups. In these figures, the top part of each panel shows the level of approval among those subjects who were not provided information about their representative's lawmaking effectiveness, and the bottom half of each panel shows the level of approval among those subjects who received the information treatment.

Figures A1-A3 help illustrate a few insights hidden within Figures 4-6. For example, Figure A1 shows that a representative's actual lawmaking effectiveness did not predict approval among respondents who received no information about their representative's relative effectiveness. In contrast, there was a strong relationship between actual lawmaking effectiveness and job approval among those subjects who received the information treatment (in the bottom half of each panel).

These figures also help illustrate why ceiling effects sometimes dampen the treatment effects. For example, Figure A2 shows that copartisans in control group have such a high favorable view of their legislator that it is hard for the information to produce a substantively and statistically significant treatment effect.

Figure A1: Informational Effects on Approval of Lawmaker

MTurk, Approval of Lawmaker

| | Ineffective | Average | Highly Effective |

CCES, Approval of Lawmaker

| | Ineffective | Average | Highly Effective |
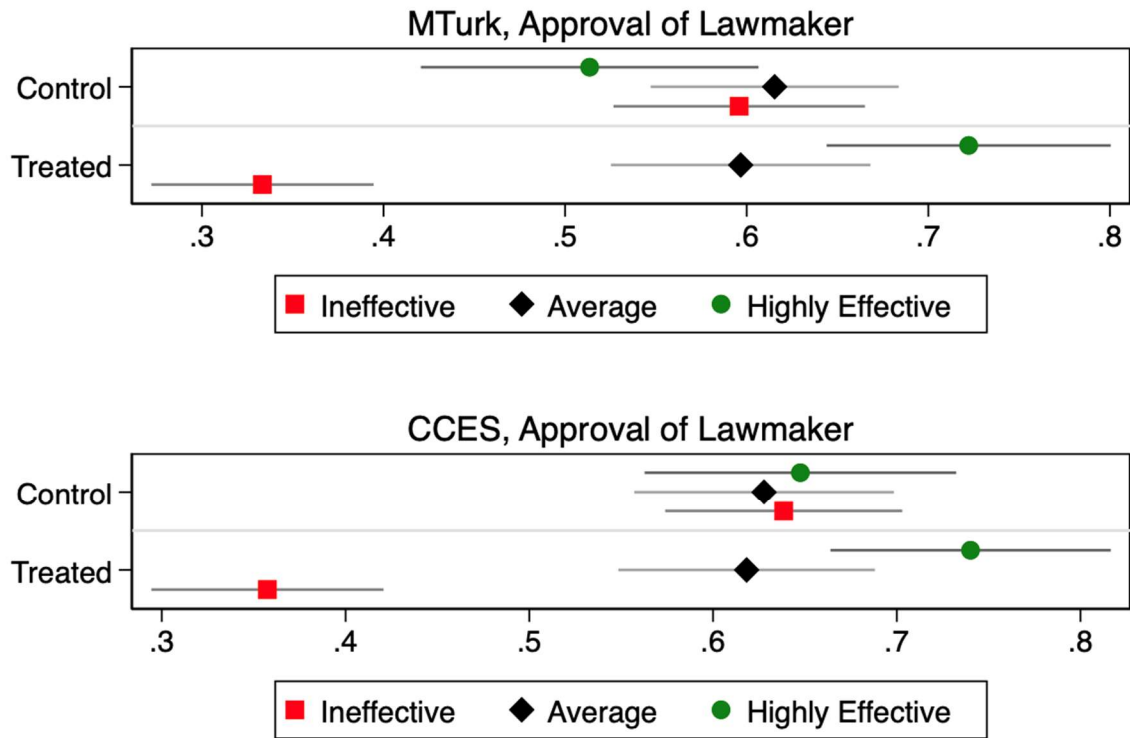
Figure A2: Treatment Effects on Approval, by Partisanship

MTurk Approval, by Partisan Alignment

Outparty, Control
Outparty, Treated
Copartisan, Control
Copartisan, Treated

0   .2   .4   .6   .8   1

■ Ineffective   ◆ Average   ● Highly Effective

CCES Approval, by Partisan Alignment

Outparty, Control
Outparty, Treated
Copartisan, Control
Copartisan, Treated

0   .2   .4   .6   .8   1

■ Ineffective   ◆ Average   ● Highly Effective
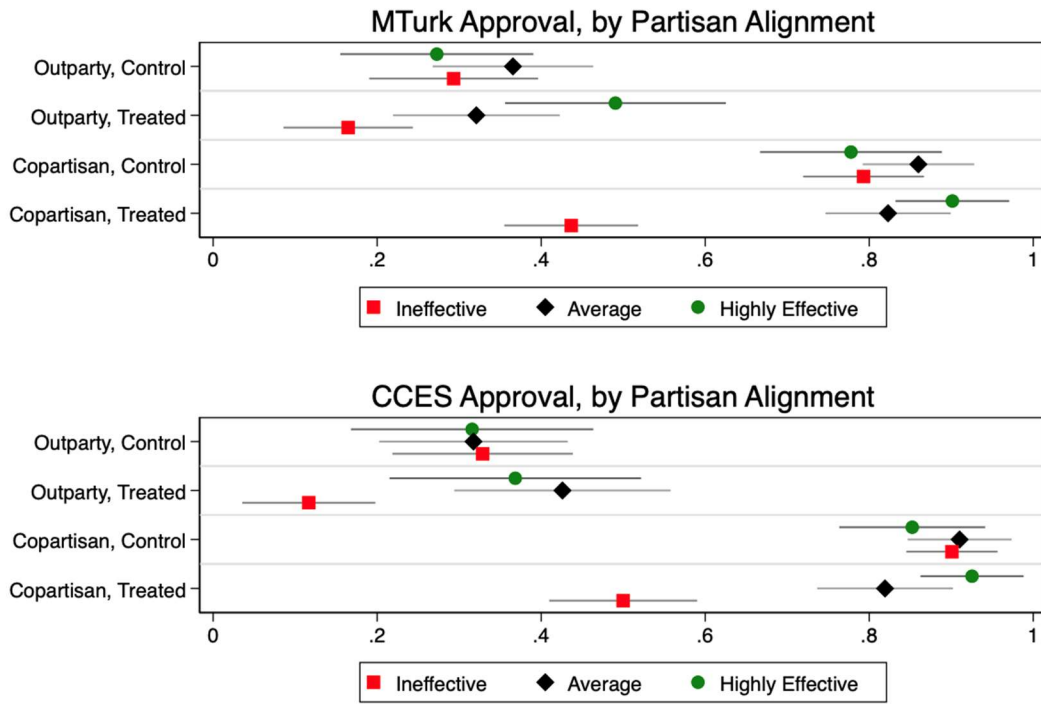
Figure A3: Treatment Effects on Approval, by Ideological Extremism

MTurk Approval, by Ideological Extremism

Moderate, Control
Moderate, Treated
Extreme, Control
Extreme, Treated

.2   .4   .6   .8   1

■ Ineffective   ◆ Average   ● Highly Effective

CCES Approval, by Ideological Extremism

Moderate, Control
Moderate, Treated
Extreme, Control
Extreme, Treated

.2   .4   .6   .8   1

■ Ineffective   ◆ Average   ● Highly Effective
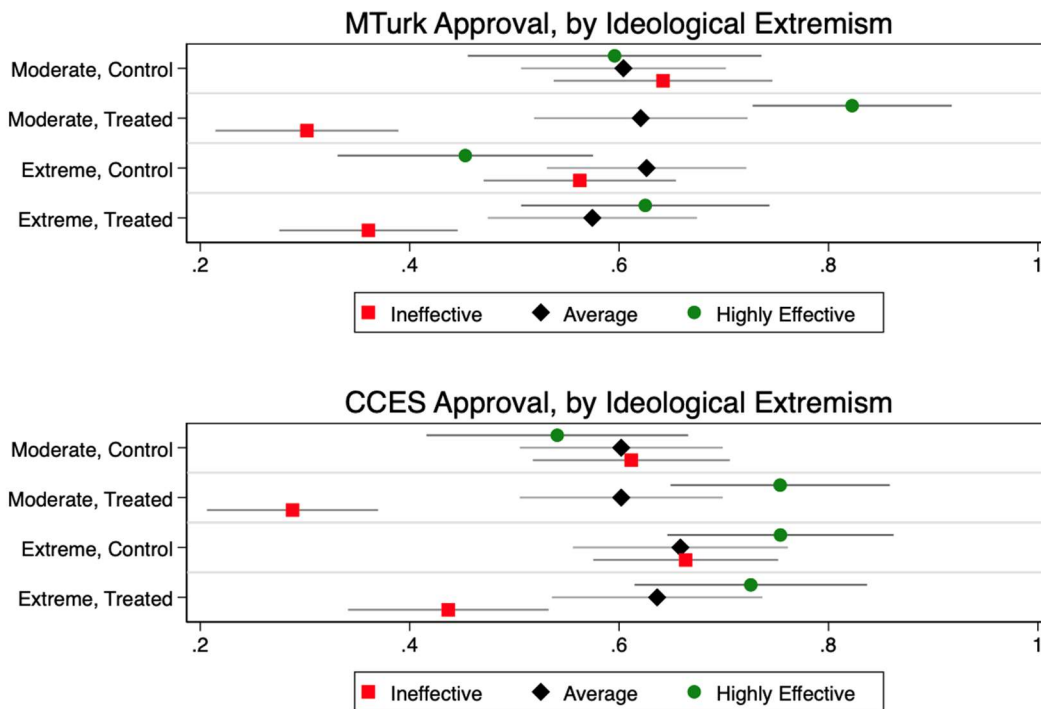
Impact of Treatment on Vote Intention in the MTurk and CCES Samples

This part of the appendix shows the results of alternative specifications to those presented in the body of the paper. First, throughout the manuscript, we focused mainly on constituents' approval of the job their representative was doing, in order to be comparable across multiple types of constituents, from voters to municipal officials. Many alternative means of assessing representatives are available, and here we note the results for one of particular interest in the MTurk and CCES samples: vote intention. Put simply, do the same conditions that result in higher approval ratings also account for a higher likelihood of voting to reelect a representative? To answer this question, we incorporated the following question in both surveys:

> Would you vote for [REPRESENTATIVE] in 2016?
>> Yes, definitely
>> Yes, probably
>> No, probably not
>> No, definitely not

To make the responses comparable to how we analyzed approval, we then combined the Yes answers together and the No answers together to form a single dichotomous vote intention variable.

Figure A4: Informational Effects on Vote Intention
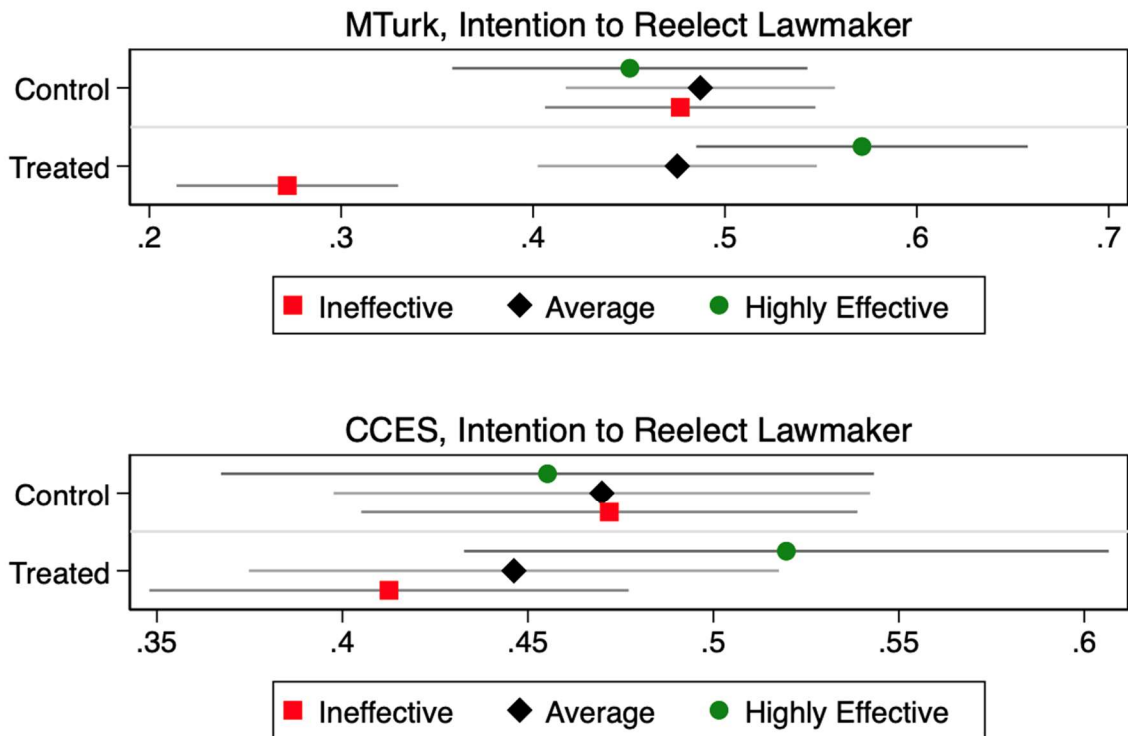
Figure A4 then mimics Figure 4 from the body of the paper. The top set of results in each panel shows that the Control group exhibits no systematic vote intention based on the lawmaking effectiveness of their representatives.

In contrast, the results from the Treated group demonstrate that constituents weigh credible information about effectiveness in their vote intentions. For the MTurk sample, a thirty percentage-point gap opens up between the vote intentions of constituents with ineffective lawmakers as their representatives and those represented by highly effective lawmakers. Perhaps because it is during the election season in which voters receive extensive information about the candidates, the gap is not as large in the CCES, but still sizable and statistically significant at just over ten percentage points.

Figure A5: Treatment Effects on Vote Intention, by Partisanship
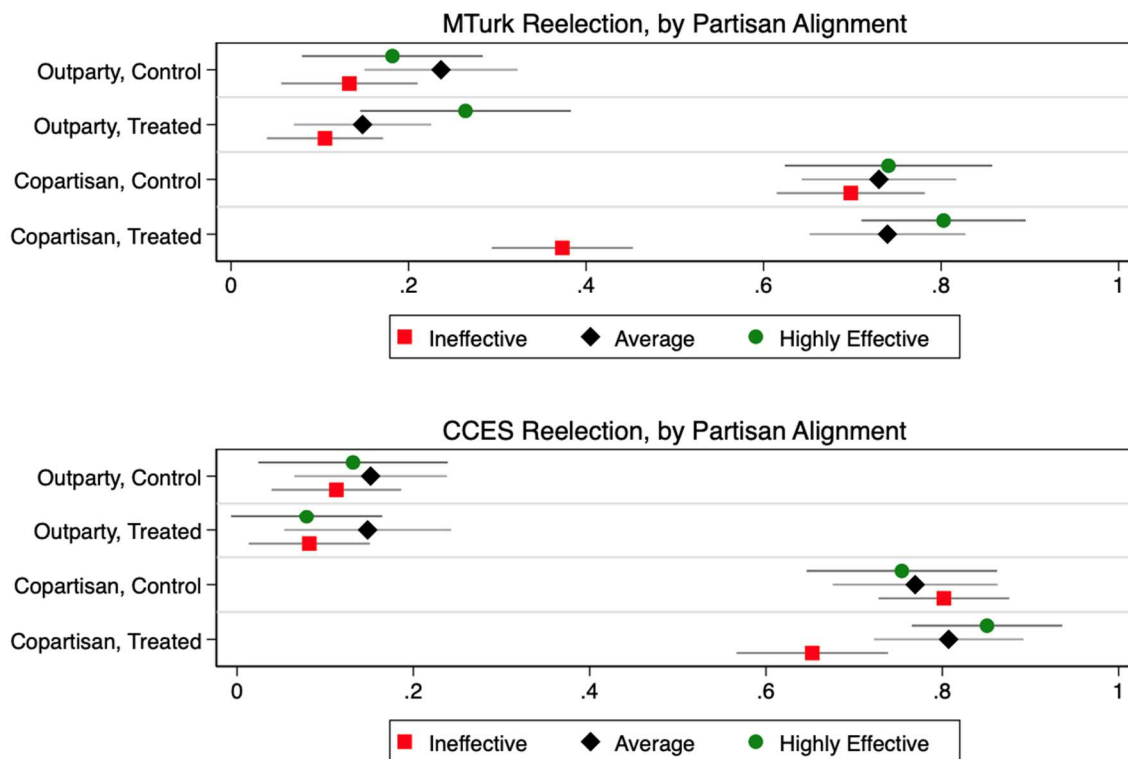
Figure A5 shows these vote intention results now further subdivided by whether the constituent and representative were copartisans or not. Consistent with the findings from Figure 5 on the drop in approval for ineffective copartisan representatives, there is a sizable decline in vote intention for this group when exposed to credible information. In the MTurk study, the treatment results in a 32 percentage-point drop in vote intention for ineffective copartisans ($p < 0.01$), with a 15 percentage-point drop found in the CCES survey ($p = 0.01$). In contrast to the results in the main body of the paper, however, the enhanced approval of effective outparty representatives does not seem to translate systematically into substantial increases in vote

intention, as shown in Figure A5. Although there is a positive result in the MTurk survey, it is slightly negative in the CCES study, perhaps indicating resistance to voting for effective lawmakers from the opposing party.

Figure A6: Treatment Effects on Vote Intention, by Ideological Extremism
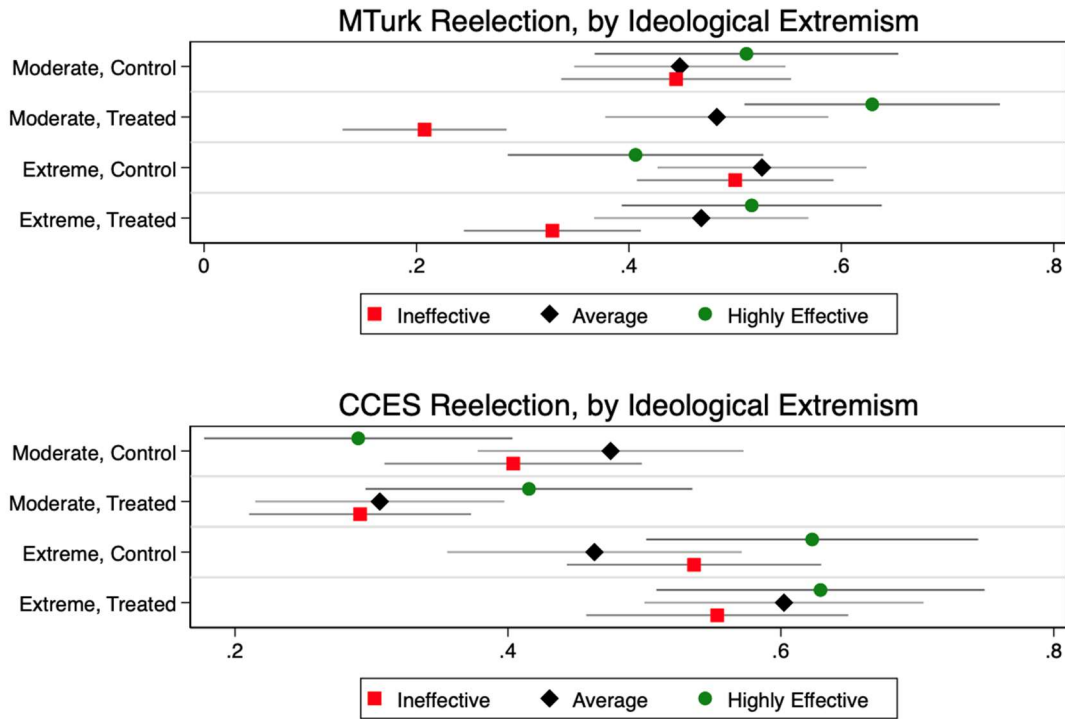
Figure A6 shows the vote intention findings now subdivided by whether the constituent was ideologically moderate or extreme. Consistent with the findings from Figure 6, the treatment produces a larger gap between ineffective and highly effective lawmakers when judged by ideological moderates than when determined by extremists. Specifically, in the MTurk sample, a gap of over forty percentage points emerges for moderates given the informational treatment, compared to about a twenty-percentage-point gap among extremists. In the CCES sample, there is no statistically significant treatment effect. However, the effect goes in the expected direction for moderates: the provision of effectiveness information is associated with about a twelve percentage-point rise in vote intention for effective lawmakers ($p = 0.14$) and an eleven percentage-point drop in the intention to vote for ineffective lawmakers ($p = 0.08$).

Appendix 2: Regression Models and Robustness Tests

Regression Model Estimates

Tables A1 – A12 provide the full regression model results for each of the findings reported in the main text. The tables include both bivariate OLS regression models as well as logistic regression models that include the treatment variable, as well as relevant interactions (for partisanship, ideological moderation, and experience). Across all models, we subset the sample by the actual effectiveness category for each respondent's representative.

Tables A13 – A18 show the results from the main text using OLS regression models estimated with the dependent variables (approval) in their original, four category scale (scaled 0-1, with 1 = strong approval, 0.666 = approval, 0.333 = disapproval, 0 = strong disapproval).

Table A1: Informational Effects on Approval of Lawmaker (MTurk - OLS)

	Effective Representative	Average Representative	Ineffective Representative
Effectiveness Information	0.209	-0.019	-0.263
	(0.062)	(0.051)	(0.047)
Intercept	0.514	0.615	0.596
	(0.045)	(0.035)	(0.035)
N	237	376	421
R^2	0.046	0.000	0.069

Table A2: Informational Effects on Approval of Lawmaker (MTurk - Logit)

	Effective Representative	Average Representative	Ineffective Representative
Effectiveness Information	0.901	-0.078	-1.081
	(0.275)	(0.211)	(0.203)
Intercept	0.054	0.470	0.388
	(0.190)	(0.147)	(0.147)
N	237	376	421
Pseudo-R^2	0.035	0.000	0.051

Table A3: Informational Effects on Approval of Lawmaker (CCES - OLS)

	Effective Representative	Average Representative	Ineffective Representative
Effectiveness Information	0.093	-0.009	-0.281
	(0.058)	(0.051)	(0.046)
Intercept	0.648	0.628	0.638
	(0.042)	(0.036)	(0.033)
N	249	366	434
R^2	0.010	0.000	0.079

Table A4: Informational Effects on Approval of Lawmaker (CCES - Logit)

	Effective Representative	Average Representative	Ineffective Representative
Effectiveness Information	0.439	-0.040	-1.155
	(0.277)	(0.216)	(0.200)
Intercept	0.608	0.523	0.569
	(0.190)	(0.154)	(0.143)
N	249	366	434
Pseudo-R^2	0.008	0.000	0.058

Tables A1-A4 above provide both OLS and logit models of the informational treatment on constituents with each type of lawmaker as their representative (highly effective, average, and ineffective). The marginal effects of the treatment as produced in these tables are shown in Figure 4 in the text.

Table A5: Informational Effects on Approval of Lawmaker by Partisanship (MTurk-OLS)

	Effective Copartisan	Effective Outparty	Average Copartisan	Average Outparty	Ineffective Copartisan	Ineffective Outparty
Effectiveness Information	0.124	0.218	-0.037	-0.045	-0.356	-0.129
	(0.064)	(0.092)	(0.052)	(0.073)	(0.057)	(0.066)
Intercept	0.778	0.273	0.860	0.366	0.793	0.293
	(0.049)	(0.064)	(0.037)	(0.050)	(0.043)	(0.048)
N	125	108	196	174	258	160
R^2	0.029	0.050	0.003	0.002	0.131	0.024

Table A6: Informational Effects on Approval of Lawmaker by Partisanship (MTurk-Logit)

	Effective Representative	Average Representative	Ineffective Representative
Effectiveness Information	0.943	-0.198	-0.744
	(0.409)	(0.321)	(0.387)
Copartisan	2.234	2.366	2.223
	(0.446)	(0.360)	(0.342)
Copartisan × Effectiveness Information	0.017	-0.081	-0.854
	(0.658)	(0.507)	(0.481)
Intercept	-0.981	-0.551	-0.879
	(0.303)	(0.215)	(0.254)
N	233	370	418
Pseudo-R^2	0.215	0.204	0.167

Table A7: Informational Effects on Approval of Lawmaker by Partisanship (CCES - OLS)

	Effective Copartisan	Effective Outparty	Average Copartisan	Average Outparty	Ineffective Copartisan	Ineffective Outparty
Effectiveness	0.073	0.053	-0.091	0.108	-0.401	-0.212
Information	(0.055)	(0.110)	(0.054)	(0.090)	(0.055)	(0.072)
Intercept	0.852	0.316	0.910	0.317	0.901	0.329
	(0.040)	(0.078)	(0.039)	(0.061)	(0.040)	(0.049)
N	128	76	161	117	229	130
R^2	0.014	0.003	0.018	0.013	0.189	0.063

Table A8: Informational Effects on Approval of Lawmaker by Partisanship (CCES - Logit)

	Effective Representative	Average Representative	Ineffective Representative
Effectiveness	0.234	0.467	-1.310
Information	(0.485)	(0.386)	(0.476)
Copartisan	2.527	3.082	2.922
	(0.502)	(0.480)	(0.407)
Copartisan ×	0.529	-1.272	-0.898
Effectiveness	(0.762)	(0.622)	(0.601)
Information			
Intercept	-0.773	-0.765	-0.715
	(0.349)	(0.271)	(0.254)
N	204	278	359
Pseudo-R^2	0.275	0.224	0.261

Tables A5-A8 above provide both OLS and logit models of the informational treatment on constituents with each type of lawmaker as their representative (highly effective, average, and ineffective), exploring whether the treatment effects differ between copartisans and outpartisans. The marginal effects evident in these tables are shown in Figure 5 in the text.

Table A9: Informational Effects on Approval of Lawmaker by Ideology (MTurk - OLS)

	Effective Ideological Extreme	Effective Moderate	Average Ideological Extreme	Average Moderate	Ineffective Ideological Extreme	Ineffective Moderate
Effectiveness	0.172	0.227	-0.052	0.017	-0.202	-0.340
Information	(0.087)	(0.084)	(0.071)	(0.073)	(0.064)	(0.069)
Intercept	0.453	0.596	0.626	0.604	0.563	0.642
	(0.062)	(0.064)	(0.049)	(0.050)	(0.046)	(0.052)
N	128	109	193	183	234	187
R^2	0.030	0.063	0.003	0.000	0.041	0.115

Table A10: Informational Effects on Approval of Lawmaker by Ideology (MTurk - Logit)

	Effective Representative	Average Representative	Ineffective Representative
Effectiveness Information	1.146	0.070	-1.422
	(0.446)	(0.304)	(0.314)
Ideologically Extreme	-0.576	0.093	-0.333
	(0.389)	(0.294)	(0.300)
Ideologically Extreme × Effectiveness Information	-0.447	-0.286	0.598
	(0.573)	(0.423)	(0.413)
Intercept	0.388	0.423	0.584
	(0.297)	(0.209)	(0.232)
N	237	376	421
Pseudo-R^2	0.062	0.001	0.054

Table A11: Informational Effects on Approval of Lawmaker by Ideology (CCES - OLS)

	Effective Ideological Extreme	Effective Moderate	Average Ideological Extreme	Average Moderate	Ineffective Ideological Extreme	Ineffective Moderate
Effectiveness Information	-0.028	0.213	-0.022	0.000	-0.227	-0.324
	(0.080)	(0.084)	(0.074)	(0.070)	(0.067)	(0.064)
Intercept	0.754	0.541	0.659	0.602	0.664	0.612
	(0.057)	(0.060)	(0.053)	(0.050)	(0.046)	(0.046)
N	123	126	170	196	213	221
R^2	0.001	0.050	0.001	0.000	0.052	0.106

Table A12: Informational Effects on Approval of Lawmaker by Ideology (CCES - Logit)

	Effective Representative	Average Representative	Ineffective Representative
Effectiveness Information	0.955	0.000	-1.359
	(0.386)	(0.292)	(0.287)
Ideologically Extreme	0.956	0.243	0.225
	(0.393)	(0.311)	(0.286)
Ideologically Extreme × Effectiveness Information	-1.102	-0.097	0.425
	(0.564)	(0.434)	(0.403)
Intercept	0.164	0.414	0.454
	(0.257)	(0.206)	(0.202)
N	249	366	434
Pseudo-R^2	0.029	0.002	0.068

Tables A9-A12 above provide both OLS and logit models of the informational treatment on constituents with each type of lawmaker as their representative (highly effective, average, and ineffective), exploring whether the treatment effects differ between ideological extremists and moderates. The marginal effects evident in these tables are shown in Figure 6 in the text.

Table A13: Informational Effects on Approval of Lawmaker (MTurk – OLS – 4-Category Dependent Variable, scaled 0-1)

	Effective Representative	Average Representative	Ineffective Representative
Effectiveness Information	0.086	-0.001	-0.116
	(0.030)	(0.025)	(0.023)
Intercept	0.495	0.516	0.509
	(0.022)	(0.017)	(0.017)
N	237	376	421
R^2	0.033	0.000	0.057

Table A14: Informational Effects on Approval of Lawmaker (CCES – OLS – 4-Category Dependent Variable, scaled 0-1)

	Effective Representative	Average Representative	Ineffective Representative
Effectiveness Information	0.070	-0.007	-0.158
	(0.036)	(0.027)	(0.027)
Intercept	0.565	0.551	0.541
	(0.026)	(0.019)	(0.019)
N	249	366	434
R^2	0.015	0.000	0.075

Table A15: Informational Effects on Approval of Lawmaker by Partisanship (MTurk – OLS – 4-Category Dependent Variable, scaled 0-1)

	Effective Copartisan	Effective Outparty	Average Copartisan	Average Outparty	Ineffective Copartisan	Ineffective Outparty
Effectiveness Information	0.071	0.053	-0.005	-0.011	-0.140	-0.087
	(0.034)	(0.043)	(0.025)	(0.037)	(0.026)	(0.036)
Intercept	0.604	0.406	0.626	0.401	0.600	0.373
	(0.026)	(0.030)	(0.018)	(0.025)	(0.019)	(0.026)
N	125	108	196	174	258	160
R^2	0.034	0.014	0.000	0.001	0.104	0.036

Table A16: Informational Effects on Approval of Lawmaker by Partisanship (CCES – OLS – 4-Category Dependent Variable, scaled 0-1)

	Effective Copartisan	Effective Outparty	Average Copartisan	Average Outparty	Ineffective Copartisan	Ineffective Outparty
Effectiveness	0.061	0.044	-0.063	0.052	-0.202	-0.166
Information	(0.041)	(0.059)	(0.030)	(0.050)	(0.031)	(0.046)
Intercept	0.705	0.368	0.709	0.386	0.684	0.371
	(0.030)	(0.042)	(0.021)	(0.034)	(0.022)	(0.031)
N	128	76	161	117	229	130
R^2	0.018	0.007	0.027	0.009	0.161	0.094

Table A17: Informational Effects on Approval of Lawmaker by Ideology (MTurk – OLS – 4-Category Dependent Variable, scaled 0-1)

	Effective Ideological Extreme	Effective Moderate	Average Ideological Extreme	Average Moderate	Ineffective Ideological Extreme	Ineffective Moderate
Effectiveness	0.063	0.109	0.002	-0.004	-0.095	-0.144
Information	(0.045)	(0.040)	(0.036)	(0.034)	(0.033)	(0.031)
Intercept	0.489	0.503	0.511	0.520	0.494	0.530
	(0.032)	(0.030)	(0.025)	(0.023)	(0.024)	(0.024)
N	128	109	193	183	234	187
R^2	0.015	0.064	0.000	0.000	0.035	0.102

Table A18: Informational Effects on Approval of Lawmaker by Ideology (CCES – OLS – 4-Category Dependent Variable, scaled 0-1)

	Effective Ideological Extreme	Effective Moderate	Average Ideological Extreme	Average Moderate	Ineffective Ideological Extreme	Ineffective Moderate
Effectiveness	-0.005	0.145	-0.024	0.007	-0.118	-0.191
Information	(0.052)	(0.047)	(0.040)	(0.036)	(0.039)	(0.037)
Intercept	0.661	0.469	0.577	0.530	0.554	0.527
	(0.037)	(0.034)	(0.029)	(0.025)	(0.027)	(0.027)
N	123	126	170	196	213	221
R^2	0.000	0.070	0.002	0.000	0.042	0.110

Tables A13-A18 above provide OLS models of the informational treatment on constituents with each type of lawmaker as their representative (highly effective, average, and ineffective), including the relevant subsets to explore the conjectures throughout the manuscript. The dependent variable in all of these cases is the full 4-category approval variable, rather than the dichotomous version used in the main body of the manuscript. On the whole, these models illustrate that the results shown throughout the manuscript are robust to the use of this alternative form of the approval variable.

Appendix 3: Details of Mechanical Turk Sample

The sample drawn from Mechanical Turk included 1,035 respondents. Participants were paid $0.50 for completing a survey that took an average of about four minutes. Because we use representatives' Legislative Effectiveness Scores from the previous (113th) Congress, which adjourned in January 2015, we dropped the 156 respondents whose representatives in the 113th Congress were no longer in office at the time of the survey. Like most MTurk samples, our sample skews (ideologically) to the left, as 69% of the respondents identify themselves as Democrats (including leaners) and 31% self-identify as Republicans.[1] Similarly, 55% of the respondents self-identify as being liberal, while 24% self-identify as being conservative. The respondents are also relatively young, with a mean age of 34 (age ranging from 18 to 74). The modal income of the sample is $20,000-40,000 (median: $40,000-60,000) and the modal education level is a Bachelor's degree (median: Associate's).

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[1] Initially 32% of respondents identified as independent and another 3% said "other". We asked all of these individuals "Do you think of yourself as closer to the Republican or Democratic party?" We gave them only the two options and all but 6 people chose one of the two parties.