## Supplemental File for "Evaluating Methods for Examining the Relative Persuasiveness of Policy Arguments"

## Notes on Survey Sampling, Interview Mode, and Participant Qualification

## Study 1

Study 1 involved an online survey of panelists collected via the Qualtrics survey platform. All surveys were conducted in English. Respondents were required to be U.S. citizens over the age of 18 currently residing within the United States. Qualtrics recruits panelists from a number of different partners, who traditionally compensate respondents with "points" or "rewards," which respondents can then exchange for gift cards, cash, raffles, or other products. Interviews were conducted from June 16-July 5, 2021. Protocols were used to ensure that respondents were humans (i.e., not bots) and that those who chose to participate in the survey were located in the United States. 6,132 respondents opened the questionnaire and 1,969 met the criteria for inclusion.

## Study 2

Study 2 involved an online survey of panelists collected via Lucid Theorem. All surveys were conducted in English. Respondents were required to be U.S. citizens over the age of 18 currently residing within the United States. Lucid recruits panelists from a number of different partners, who traditionally compensate respondents with "points" or "rewards," which respondents can then exchange for gift cards, cash, raffles, or other products. Interviews were conducted from November 11-12, 2021. Protocols were used to ensure that respondents were humans (i.e., not bots) and that those who chose to participate in the survey were located in the United States. 2,189 respondents started the questionnaire and 2,002 met the criteria for inclusion.

## Question and Treatment Wording

## Study 1 Questions

Post-Only Design: Control
As you may know, Washington, D.C. is not a state and therefore does not have voting members in the U.S. Congress.

Would you favor or oppose making Washington, D.C. a separate state?
1 Favor
2 Oppose
9 NA/Refused

Post-Only Design: Taxes Treatment
As you may know, Washington, D.C. is not a state and therefore does not have voting members in the U.S. Congress.

Would you favor or oppose making Washington, D.C. a separate state if you heard that D.C. residents pay federal taxes?

1 Favor
2 Oppose
9 NA/Refused

## Post-Only Design: Corruption Treatment

As you may know, Washington, D.C. is not a state and therefore does not have voting members in the U.S. Congress.

Would you favor or oppose making Washington, D.C. a separate state if you heard that some D.C. elected officials have had corruption scandals in recent years?

1 Favor
2 Oppose
9 NA/Refused

Repeated Measures Within-Subjects Design
As you may know, Washington, D.C. is not a state and therefore does not have voting members in the U.S. Congress.

Would you favor or oppose making Washington, D.C. a separate state?

1 Favor
2 Oppose
9 NA/Refused

Next, we're going to list some arguments some people have made for or against making
Washington, D.C. a separate state.
Would you favor or oppose making Washington, D.C. a separate state if you heard that [RANDOMIZED: D.C. residents pay federal taxes / some D.C. elected officials have had corruption scandals in recent years?]?

1 Favor
2 Oppose
9 NA/Refused

## Study 2 Questions

Post-Only Design: Control
Would you favor or oppose allowing the federal government to negotiate with drug companies to get a lower price on medications that would apply to both Medicare and private insurance?

1 Favor
2 Oppose
9 NA/Refused

## Post-Only Design: Save Money Treatment

Would you favor or oppose allowing the federal government to negotiate with drug companies to get a lower price on medications that would apply to both Medicare and private insurance if you heard that these negotiations could save people money on their prescription drugs?

1 Favor
2 Oppose
9 NA/Refused

## Post-Only Design: Limit Access Treatment

Would you favor or oppose allowing the federal government to negotiate with drug companies to get a lower price on medications that would apply to both Medicare and private insurance if you heard that these negotiations could limit people's access to newer prescription drugs?

1 Favor
2 Oppose
9 NA/Refused

## Repeated Measures Within-Subjects Design

Would you favor or oppose allowing the federal government to negotiate with drug companies to get a lower price on medications that would apply to both Medicare and private insurance?

1 Favor
2 Oppose
9 NA/Refused

Next, we're going to list arguments some people have made for or against allowing the federal government to negotiate prescription drug prices.

Would you favor or oppose allowing these negotiations if you heard that [RANDOMIZED: people could save money on their prescription drugs / it could limit people's access to newer prescription drugs]?

1 Favor
2 Oppose
9 NA/Refused

## Supplementary Tables

Table A1. Sample Demographics

| Variable | Study 1 | Study 2 |
| :--- | :--- | :--- |
| \% Democrat | $34.0 \%$ | $38.5 \%$ |
| \% Liberal | $25.1 \%$ | $25.3 \%$ |
| Race |  |  |
| White | $70.3 \%$ | $71.8 \%$ |
| Black | $19.2 \%$ | $13.3 \%$ |
| Male | $48.9 \%$ | $48.5 \%$ |

Education

| High School or less | $23.0 \%$ | $32.7 \%$ |
| :--- | :--- | :--- |
| Associate's/Some College | $37.0 \%$ | $37.1 \%$ |
| Bachelor's or more | $40.0 \%$ | $30.3 \%$ |

Table A2a. Study 2 - Demographic Balance Across Experimental Conditions

| Variable | Control | Taxes Only | Corruption Only | RMWS: <br> TaxesCorruption | RWMW: <br> CorruptionTaxes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Partisanship |  |  |  |  |  |
| Democrat | 34.5\% | 32.9\% | 33.3\% | 36.3\% | 33.2\% |
| Republican | 28.5\% | 29.6\% | 28.6\% | 30.2\% | 32.9\% |
| Independent/Other | 37.0\% | 37.5\% | 38.1\% | 33.5\% | 33.9\% |
| Ideology |  |  |  |  |  |
| Liberal | 27.8\% | 26.3\% | 26.1\% | 23.9\% | 21.4\% |
| Conservative | 32.3\% | 33.4\% | 32.7\% | 34.5\% | 36.2\% |
| Moderate/Other | 40.0\% | 40.3\% | 41.2\% | 41.6\% | 42.4\% |
| Race |  |  |  |  |  |
| White | 68.8\% | 70.4\% | 69.8\% | 71.1\% | 71.6\% |
| Black | 20.5\% | 15.3\% | 20.2\% | 19.8\% | 20.2\% |
| Male | 50.8\% | 48.2\% | 49.1\% | 49.8\% | 46.7\% |
| Education |  |  |  |  |  |
| High School or less | 21.5\% | 22.7\% | 23.8\% | 25.4\% | 21.7\% |
| Associate's/Some College | 37.0\% | 38.3\% | 38.9\% | 32.5\% | 38.3\% |
| Bachelor's or more | 41.5\% | 39.0\% | 37.3\% | 42.1\% | 40.1\% |

Prob $>\mathrm{Chi}^{2}=0.796, \mathrm{R}^{2}=0.005$

Table A2b. Study 2 - Demographic Balance Across Experimental Conditions

| Variable | Control | Save <br> Money <br> Only | Limit <br> Access <br> Only | RMWS: <br> Save-Limit | RWMW: <br> Limit-Save |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Partisanship | $43.2 \%$ | $34.4 \%$ | $36.1 \%$ | $41.4 \%$ | $37.7 \%$ |
| Democrat <br> Republican | $26.3 \%$ | $32.7 \%$ | $28.4 \%$ | $27.2 \%$ | $26.9 \%$ |
| Independent/Other | $30.6 \%$ | $32.9 \%$ | $35.6 \%$ | $31.4 \%$ | $35.4 \%$ |
| Ideology |  |  |  |  |  |
| Liberal <br> Conservative | $25.2 \%$ | $24.5 \%$ | $21.4 \%$ | $27.5 \%$ | $24.6 \%$ |
| Moderate/Other | $45.0 \%$ | $37.4 \%$ | $33.3 \%$ | $33.1 \%$ | $34.9 \%$ |
| Race | $73.4 \%$ | $73.2 \%$ | $74.1 \%$ | $69.1 \%$ | $69.3 \%$ |
| White | $12.9 \%$ | $13.2 \%$ | $12.8 \%$ | $13.9 \%$ | $13.5 \%$ |
| Black | $48.8 \%$ | $49.5 \%$ | $43.9 \%$ | $50.7 \%$ | $50.0 \%$ |
| Male |  |  | $39.5 \%$ | $40.6 \%$ |  |
| Education | $28.2 \%$ | $33.9 \%$ | $34.9 \%$ | $34.1 \%$ | $31.8 \%$ |
| High School or less | $41.6 \%$ | $34.2 \%$ | $37.7 \%$ | $33.1 \%$ | $39.3 \%$ |
| Associate's/Some <br> College <br> Bachelor's or more | $30.3 \%$ | $31.9 \%$ | $27.4 \%$ | $32.8 \%$ | $28.9 \%$ |

Prob $>\mathrm{Chi}^{2}=0.096, \mathrm{R}^{2}=0.007$

NOTE: Figures A1 and A2 depict mean levels of policy support by condition in Studies 1 and 2, respectively. These results are already reflected in Figures 1 and 2 of the main text, though those figures presented treatment effects and did not provide a sense for policy support in the control condition. Error bars represent $95 \%$ confidence intervals.

Figure A1. Support for DC Statehood by Research Design Approach


Figure A2. Support for Drug Price Negotiation by Research Design Approach


NOTE: Tables A3a-A3b assess the degree to which the effect of a particular argument in the repeated measures within-subjects designs is dependent on that argument's placement in the sequence (e.g., first, second, third, etc.). The results suggest that the order does not significantly alter the estimated effect of the argument.

Table A3a. Study 1: Support for DC Statehood After Argument by Order of Argument

|  | 1st <br> Argument |  |
| :--- | ---: | ---: |
| Residents Pay Taxes | $49.0 \%$ | $48.2 \%$ |
| Argument |  |  |

Table A3b. Study 2: Support for Prescription Drug Price Negotiations After Argument by Order of Argument

|  | $\begin{array}{l}\text { 1st } \\ \text { Argument }\end{array}$ |  |
| :--- | ---: | ---: | \(\left.\begin{array}{l}2nd <br>


Argument\end{array}\right]\)|  | $91.2 \%$ | $91.2 \%$ |
| :--- | ---: | ---: |
| Save Money | $39.0 \%$ | $45.3 \%$ |

NOTE: Tables A4a and A4b display the results of random effects linear regressions, interacting the study design (post-only or repeated measures within-subjects) with the experimental treatment effect. This is done by having multiple observations for respondents that answered the question multiple times, clustering at the level of the respondent. These are formal tests of significance for the results displayed in Figures 1 and 2.

Table A4a. Study 2 Interaction of Effect Size and Design

|  | Taxes Treatment | Corruption <br> Treatment |
| :--- | :---: | :---: |
| Treatment | 0.056 | -0.022 |
|  | $(0.035)$ | $(0.034)$ |
| RMWS Design | 0.003 | 0.003 |
|  | $(0.030)$ | $(0.030)$ |
| Treat x RMWS | 0.039 | $-0.070^{+}$ |
|  | $(0.038)$ | $(0.038)$ |
| Constant |  |  |
|  | $0.388^{* *}$ | $0.388^{* *}$ |
| $R^{2}$ (within clusters) | $(0.024)$ | $(0.024)$ |
| $R^{2}$ (between clusters) | 0.045 | 0.040 |
| $C l u s t e r s$ | 0.002 | 0.002 |
| $N$ | 1,578 | 1,577 |

Robust standard errors in parentheses
${ }^{+} \mathrm{p}<0.1,{ }^{*} p<0.05,{ }^{* *} p<0.01,{ }^{* * *}$ (two-tailed)

Table A4b. Study 2 Interaction of Effect Size and Design

|  | Save Money <br> Treatment | Limit Access <br> Treatment |
| :--- | :---: | :---: |
| Treatment | -0.024 | $-0.231^{* *}$ |
| RMWS Design | $(0.017)$ | $(0.024)$ |
|  | -0.017 | -0.017 |
| Treat x RMWS | $(0.014)$ | $(0.014)$ |
|  | 0.001 | $-0.281^{* *}$ |
| Constant | $(0.020)$ | $(0.031)$ |
|  |  |  |
| $R^{2}$ (within clusters) | $0.952^{* *}$ | $0.952^{* *}$ |
| $R^{2}$ (between clusters) | $(0.011)$ | $(0.011)$ |
| $C l u s t e r s$ | 0.006 | 0.484 |
| $N$ | 0.003 | 0.102 |

Robust standard errors in parentheses
${ }^{+} \mathrm{p}<0.1,{ }^{*} p<0.05,{ }^{* *} p<0.01,{ }^{* * *}$ (two-tailed)

NOTE: Table A5 displays several pairwise comparisons that serve as an alternate way of estimating the effect of the RMWS design. In the first row, we estimate via OLS the difference in policy support between those who were exposed to an argument in the post only experiment compared to those who were assigned to the control condition in the post only experiment. In the second row, we compare policy support after the first argument in the RWMS with policy support in the post only control condition. In the third row, we estimate the difference-in-differences.

Table A5. Estimated Effect of Arguments via OLS Regression Using the Control Condition in the Post Only Experiment as the Baseline

|  | Study 1 |  | Study 2 |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Taxes | Corruption | Save Money | Limit Access |
| Post Only Argument - Control | 0.056 | -0.022 | -0.024 | $-0.231^{* *}$ |
|  | $(0.035)$ | $(0.034)$ | $(0.017)$ | $(0.025)$ |
|  |  |  |  |  |
|  |  |  |  |  |
| RMWS (First Argument) - | $0.102^{* *}$ | $-0.104^{* *}$ | $-0.040^{*}$ | $-0.562^{* *}$ |
| Control | $(0.035)$ | $(0.033)$ | $(0.018)$ | $(0.028)$ |
|  |  |  |  |  |
| Diff-in-Diff | 0.046 | $-0.083^{*}$ | -0.016 | $-0.331^{* *}$ |
|  | $(0.035)$ | $(0.034)$ | $(0.018)$ | $(0.028)$ |

Standard errors in parentheses ${ }^{+} \mathrm{p}<0.1,{ }^{*} p<0.05,{ }^{* *} p<0.01$ (two-tailed)

Table A6. Study 2: Estimated Effect of "Limit Access" Argument by Ideological Extremity

|  | Post-Only | RMWS |
| :--- | :--- | :--- |
| Full Sample | $-0.231^{* *}$ | $-0.513^{* *}$ |
|  | $(0.025)$ | $(0.019)$ |
| Moderate/No Ideology | $-0.233^{* *}$ | $-0.538^{* *}$ |
|  | $(0.039)$ | $(0.030)$ |
| Lean Liberal/Lean | $-0.225^{* *}$ | $-0.599^{* *}$ |
| Conservative | $(0.065)$ | $(0.044)$ |
|  |  |  |
| Liberal/Conservative | $-0.242^{* *}$ | $-0.541^{* *}$ |
|  | $(0.058)$ | $(0.041)$ |
|  | $-0.221^{* *}$ | $-0.383^{* *}$ |
| Strong Liberal/Strong |  |  |
| Conservative | $(0.053)$ | $(0.039)$ |
| Standard errors in parentheses <br>  <br>  <br>  <br> p $<0.1,{ }^{*} p<0.05,{ }^{* *} p<0.01,{ }^{* * *}($ two-tailed $)$ |  |  |

Table A7. Item Non-Response Rates by Assignment to Condition in Study 2

| Between Subjects | $2.11 \%$ |
| :--- | :--- |
| RMWS | $2.09 \%$ |
| N | 2,045 |

Note: In Study 1, respondents were not offered the option to skip the question and did not qualify as a complete if they did not finish the survey.

