Reason for Updating

Upon completing data collection and initiating data cleaning, we realized that our original analysis plan was unworkable due to dividing-by-zero issues associated with constructing the variable(s) *p*. Upon realizing this, we paused the cleaning of these variables and wrote the new analysis plan proposed here. We are testing H1 as before, except now it is being tested by inferring group-level treatment effects on p via regression. H2, H3, and H4 (included in the previous version but now omitted) were eliminated from the analysis plan because insufficient data was ultimately collected to analyze them.

Hypotheses

H1: Those who participated in the Deliberative Town Hall will support their policy preferences in more sociotropic-regarding terms than those who do not participate.

We will treat all other outcomes as research questions, meaning that we do not necessarily have conjectures about direction.

Design Plan

Unchanged

Sampling Plan

Unchanged, except that participants are given only post-surveys, not pre- and post- surveys.

Variables

Manipulated variables:

The independent variable is whether they participated in the deliberative town hall. From this, there are four categories: (1) invited and participated, (2) invited not participated, (3) interested not invited (control group A); and (4) not interested and not invites (control group B).

Directly measured variables:

g_i = respondent i's group membership, 1 if i is in Group 1 and 0 if i is in Group 2

f_i = respondent i's belief about the percentage of society in Group 2 (11 point scale ranging from 0 to 1)
u_1(A) = respondent i's belief about how policy A will help/harm members of Group 1 (5 point scale ranging from -1 to 1)
u_2(A) = respondent i's belief about how policy A will help/harm members of Group 2 (5 point scale ranging from -1 to 1)
u_1(B) = respondent i's belief about how policy B will help/harm members of Group 1 (5 point scale ranging from -1 to 1)
u_2(B) = respondent i's belief about how policy B will help/harm members of Group 2 (5 point scale ranging from -1 to 1)
v_i(A) = respondent i's agreement with policy A (5 point scale ranging from -1 to 1)
v_i(B) = respondent i's agreement with policy B (5 point scale ranging from -1 to 1)

Constructed variables.
We will construct the following variables, from the *post*-deliberation versions of all these variables.

Y_A = v_A - (g u_1(A) + (1-g) u_2(A))
Y_B = v_B - (g u_1(B) + (1-g) u_2(B))
X_A = (1 - f - g) (u_1(A) - u_2(A))
X_B = (1 - f - g) (u_1(B) - u_2(B))

Analysis Plan

Under the structural assumptions of the model, we have two regressions through the origin:

YA = p XA
YB = p XB

To run this regression on actual data, we will create the following four datasets:

(1) Pensions DTH and policy A,
(2) Pensions DTH and policy B,
(3) Political system DTH and policy A, and
(4) Political system DTH and policy B.

We will then stack those four subsets and create indicator variables for "policy == B" and "political system DTH". Since we stack, let us drop the A and B subscripts from Y_A, Y_B, etc.

First, to test for treatment effects, both overall and in subgroups, we fit the following regression model:

$$Y = constant + X + invited + X * invited + \epsilon$$

We interpret the coefficient on X * invited as the treatment effect, and we expect it to be positive, meaning an increase in sociotropic preferences.

The overall tests include:

(1) subset of stacked data for Pensions DTH only
(2) subset of stacked data for Political system DTH only
(3) Combined DTHs (all stacked data)

For subgroups, we fit each of the three models above, now for the following subsets of the stacked dataset:

(a) Policy A only
(b) Policy B only
(c) Advantaged group only (g == 1)
(d) Disadvantaged group only (g == 0)
(e) Policy A/Advantaged group only
(f) Policy B/Advantaged group only
(g) Policy A/Disadvantaged group only
(h) Policy B/Disadvantaged group only

This totals 27 (= 3 models X 9 subsets, including overall tests) estimates of (conditional) treatment effects.

Second, we will test for differences in treatment effects. To do so, we will use interaction terms, which we denote here generally as "interaction", a dichotomous variable. We augment the original regression equation as follows:

$$Y = constant + X + invited + interaction + X * interaction + invited * interaction + X * invited + X * invited * interaction + \epsilon$$

We interpret the coefficient on X * invited * interaction as the difference between the treatment effects for the subgroups with interaction == 1 and interaction == 0. These tests will use the full stacked dataset.

Here, we test for 3 conditional effects:

(4) Difference between DTHs with interaction := "Political System DTH"
(5) Difference between policies with interaction := "Policy B"
(6) Difference between groups with interaction := "Disadvantaged group"

We will also explore more deeply conditional differences (e.g., a difference between groups in the Political System DTH on Policy B), using a saturated regression model and calculating appropriate quantities of interest. This final set of deeply conditional differences includes 12 effects (diff in groups by 4 pairs of DTH-policies + diff in DTHs by 4 pairs of group-policies + diff in policies by 4 pairs of DTH-groups). We will report all such tests in the appendix.

Across these three analyses, we are pre-registering 42 (= 27 + 3 + 12) tests.

All standard errors will be clustered at the respondent level. All p values will be two-tailed and corrected for false discovery rates within families, and we will use a significance threshold of 0.05.