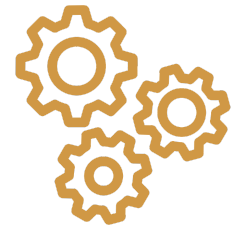


Analysis Plan

Project Name: Survey uptake decisions with transparent default choices

Project Code: 2101-b (transparent defaults)

Date Finalized: February 3, 2022



How this document is to be used:

This document is associated with the Analysis Plan Commitment gate in the OES project process. For a step-by-step guide to Analysis Plan Commitment and a summary of roles and responsibilities, see the [Project Process Guide](#).

This document serves as a basis for distinguishing between planned confirmatory analyses and any exploratory analyses that might be conducted on project data. This is crucial to ensuring that results of statistical tests are properly interpreted and reported. For the Analysis Plan to fulfill this purpose, it is essential that it be finalized and date-stamped before we take possession of outcome data. Once this plan is finalized, a date is entered above, and the document is posted publicly on our team website.

If any analyses are described that will not be included in the OES abstract or reported to the agency partner, then explicitly identify these in order to streamline reanalysis.

Project Description

This project leverages an online survey experiment among federal employees involved in the process of translating information and evidence about a program into actionable policies and programs. The experiment's primary aim is to test ways of presenting information to improve *sensitivity* to impact-relevant information about a program.

An additional experiment at the conclusion of the survey will test the effect of providing a transparent default message on the choice to receive or opt out of future surveys. The last question of the survey asks respondents whether they would like to be contacted to participate in future surveys. Respondents who consent to be contacted may receive up to one survey request per month, and can opt to not participate in any future survey.

For all respondents the "Yes you can contact me again" option is pre-selected (by default) when the question appears (and the "No, please don't contact me again" option is left unselected). Implementing a default selection for this choice - preselecting the "yes" option for the future participation question - may reduce burden for respondents by allowing them to easily answer the question with limited attention but preserve, with minimal additional effort, the ability to opt out of future surveys.

A transparent default in this context means disclosing the target behavior, purpose, or general effect of the default selection.¹ To test the effect of a transparent default, additional text is added to the pre-selected “Yes” option that reads: “NOTE: We have preselected this option because we want to have enough respondents for future surveys to help build evidence to improve government services.”

Preregistration Details

This Analysis Plan will be posted on the OES website at oes.gsa.gov. In addition, this project will be preregistered in the AEA RCT registry at <https://www.socialscienceregistry.org/trials/7715>.

Hypotheses

The primary hypothesis is that providing a transparency statement along with a default selection will increase the likelihood that respondents will accept the default selection and choose to receive future survey contacts.

Data and Data Structure

This section describes variables that will be analyzed, as well as changes that will be made to the raw data with respect to data structure and variables.

Data Source(s):

All data will be collected and stored in the GSA Qualtrics platform. Data will be downloaded for the analysis and stored securely on GSA’s Google Drive platform.

Outcomes to Be Analyzed:

The outcome to be analyzed is the submitted response to the final question on the survey. The variable takes values of “Yes” or “No”.

Imported Variables:

No variables will be imported.

Transformations of Variables:

The outcome variable will be coded as a binary variable, where a “Yes” response =1 and a “No” response =0. We will also create an index indicator, *treatment*, which will equal one if the survey question included the transparency statement, and zero otherwise.

Transformations of Data Structure:

N/A

Data Exclusion:

¹ Paunov, Yavor, Michaela Wänke, and Tobias Vogel. "Ethical defaults: which transparency components can increase the effectiveness of default nudges?." *Social Influence* 14, no. 3-4 (2019): 104-116.

We will exclude respondents who didn't see the final question in the survey. We will also only keep the first complete response received via a single personalized survey link. That is, if the survey was taken multiple times using the same survey ID, we will not look at additional complete responses.

Treatment of Missing Data:

Some survey respondents may quit the survey before responding to the final question. We will check to see if there exists differential attrition by treatment condition for this type of item non-response. The check on differential attrition will regress a binary indicator of non-response (=1 if saw the question but didn't respond, =0 if responded) on *treatment* for all respondents who completed the main portion of the survey. If this regression reveals no statistically significant difference in the likelihood of item non-response (based on a t-test with alpha=0.05 rejection region), observations with missing data will be ignored for reporting main results.

If we reject the hypothesis of balanced non-response by treatment condition we will perform a "bounding" sensitivity analysis on the confirmatory analysis described below.

Descriptive Statistics, Tables, & Graphs

We will prepare a bar chart showing the share of respondents in each condition who chose the "Yes" response, with 95% confidence intervals for both bars.

Statistical Models & Hypothesis Tests

This section describes the statistical models and hypothesis tests that will make up the analysis – including any follow-ups on effects in the main statistical model and any exploratory analyses that can be anticipated prior to analysis.

Statistical Models:

We will estimate an ordinary least squares regression of the binary response variable on the treatment indicator and respondent-specific covariates:

$$Y_i = \beta_0 + \beta_1 treatment_i + \beta_2 X_i + \varepsilon_i$$

where i indexes respondents to the survey question:

- Y_i is the outcome of interest, i.e. selection of "Yes" (=1) or "No" (=0).
- $treatment_i$ is an indicator equal to one if the respondent sees the transparent default statement and equal to zero if they do not see the transparent default statement.
- X_i is a vector of respondent-specific demographic variables. These variables include respondent self-reported age (age-range categories), gender (female or males/non-binary/third gender/prefer not to say), race (White only or any other category, which includes American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, prefer not to say, other), and Federal agency the respondent works for (Department of Education, Department of Health and Human

Services, General Services Administration, and other). The precise way these demographic variables are categorized and included in the specification is not defined here.

Heteroskedasticity-consistent standard errors (HC2) will be used for the analysis.

Confirmatory Analyses:

The confirmatory analysis will test the hypothesis that the transparent default statement does not affect the likelihood of choosing “Yes” for the question response (i.e., keep the default selection), or:

$$H_0: \beta_1 = 0$$

Exploratory Analysis:

N/A

Inference Criteria, Including Any Adjustments for Multiple Comparisons:

We will use a t-test to create p-values for a two-sided test with an alpha=0.05 rejection region. We plan to include respondent-specific covariates in the estimation procedure to produce a more precise estimate of the treatment effect. We will present estimated treatment effects both with and without covariate adjustment.

In the event that there is differential attrition by treatment condition due to item non-response to the survey question we will adjust inference about the hypothesis test based on Manski bounds. Specifically, we would re-run the analysis by replacing all missing treatment outcomes with 1 and missing control outcomes with 0 and then repeat this analysis with all treatment outcomes replaced with 0 and control outcomes with 1 .

If either or both of the analyses in the sensitivity test yield inferences that are inconsistent with the main analysis inference (e.g., if the main analysis rejects the null hypothesis but one of the sensitivity tests does not reject), we will report the main result but include a statement that there was differential attrition and that sensitivity tests to account for non-random missingness indicate that the original result may be due to selection bias.

Limitations:

It is possible that many survey respondents who complete the main portion of the survey will not complete the entire survey, including the final question that is the source of data for this analysis. In that case the results may not be generalizable to the entire sample of survey participants.

Link to an Analysis Code/Script:

N/A