

Pre-Analysis Plan for “*Disentangling the Drivers of Taste Discrimination Using List Experiments.*”

July 2024

Primary Outcome Variables

- i) The average differences-in-means between control and treatment groups from all lists for all key sensitive statements (using the list experiment data).
- ii) The answers to the direct sensitive questions (using the survey data).
- iii) The differences between i) and ii).
- iv) The portion of an endowment that participants choose to donate to a charity versus keep for themselves and how it correlates with i) and ii).

Primary Outcome Variables (Explanation)

- i) Average differences-in-means between treatment and control from all lists: this is the outcome variable that comes from our double list experiment technique. As explained in more detailed in the experimental design section of our pre-analysis plan registration, for a given sensitive statement, half of the subjects will see “List A” and “List B + Key Sensitive Item” and the remaining half will see “List A + Key Sensitive Item” and “List B”. We will take the difference in means based on the answers provided to “List A” and “List A + Key Sensitive Item”, next take the difference in means based on the answers provided to “List B” and “List B + Key Sensitive Item”, and then we will calculate the average of these two differences in means. This gives us the estimated share of the population with the key sensitive attribute.
- ii) The answers to the direct sensitive questions (using the survey data): these are baseline estimates of the share of the population with the key sensitive attributes (without accounting for social desirability bias).
- iii) The differences between i) and ii): this is the estimated size of the social desirability bias.
- iv) The portion of an endowment that participants choose to donate to a charity versus keep for themselves and how it correlates with i) and ii). Specifically, we will compare list experiment estimates and answers to the direct sensitive questions across participants as follows: (1) those who choose to donate a positive amount to the charity vs those do not; (2) the top and bottom 50th percentiles of donors; (3) the top and bottom 25th and 75th percentiles of donors. This is an estimate of how preferences elicited from the survey correlate with real-stakes choices.

Statistical Model Specification

We will estimate differences in means using parametric and non-parametric estimation methods with and without controls.

We will compare the means between the list experiment and the direct questions. We will also compare the means between the list experiment estimates and direct questions as outlined above. These comparisons will rely on using both parametric and non-parametric tests.

Covariates Subgroup Analysis / Heterogeneous Treatment Effects

We plan to investigate heterogeneous treatment effects across subgroups (if statistical power allows) identified using the following variables:

- Age
- Race and indigenous status
- Sex and gender identity
- Sexual orientation
- Socio-economic status
- Geography
- Political beliefs and religious affiliation
- LGBTQ+ attitudes and familiarity
- Beliefs regarding attitudes of the general Chilean population

Robustness, Extensions, and Quality Checks

As a robustness check of our main findings, we will:

- Include/exclude from the analysis subjects who fail two or more attention checks.
- Include/exclude from the analysis procrastinators and speeders based on response time (i.e., participants who take too long or too short to complete the survey, defined as top/bottom 5%).
- Exclude respondents whose Qualtrics metadata suggest they are not in Chile.
- Follow tests proposed by Tsai (2019) and Blair and Imai (2012) to check for the assumptions required for the validity of list experiments.
- Adjust standard errors to account for sampling design, that is, strata (quotas to mimic Census population data) and weights provided by local partner firm, DATAVOZ.
- Include/exclude data from pilots run by DATAVOZ.

Quality Checks:

- We will use data from a pilot run online via Prolific to test that exposure to the list experiment does not affect the average responses to the direct questions. If it does, we will adjust our design for the main DATAVOZ sample so that participants are randomly presented with the list experiment and/or with the direct questions.

- We will regress assignment to each treatment on demographic covariates to show none to be statistically significant. If some variables are unbalanced, we will follow the regression with controls approach as Detkova et al. (2021) and Gerber and Green (2012) to include variables that show imbalance as controls in linear regressions to correct for the treatment randomization failure that could happen by chance.
- We will check for floor and ceiling effects within each list experiment and check for order effects across lists.
- We will compare sample statistics using the most recent data available from the Chilean Census and, specifically, check for the representativeness of our sample in terms of age, gender, and region, among other characteristics. Additionally, when available, we will check sample statistics from our survey to statistics from the same (or similar) questions in other large-scale surveys conducted in Chile such as the World Value Survey and Latinobarometro surveys.
- We will report statistics on attrition and, specifically, if participants drop out during the list experiment or during the LGBTQ-related sensitive direct questions. We will check to see if the attrition rates are different across observable characteristics.
- If any, we may drop respondents who indicate, at the end of the survey, that the instructions were not clear to them or that indicate that they had significant trouble completing the survey.

Extensions

- We will compare answers to the direct LGBTQ-sensitive questions to the direct questions on other sensitive topics to compare attitudes towards LGBTQ+ individuals versus other groups and/or in other contexts.

Additional measures will be taken while the survey is being administered:

- If survey collection lasts for several days, we will include day of the week and week of survey as controls.
- Researchers will monitor the number of daily visits to their personal websites to check for anomalies.