

Pre-Analysis Plan

Primary Outcome Variables

Our primary outcome variables are:

- (i) Recipients' ID-flag choices
- (ii) Amount sent by dictators in the dictator game

Secondary Outcome Variables

Our secondary outcome variables are:

- (i) Recipients' ID-string choices
- (ii) Dictators' beliefs about demographics of matched recipients
- (iii) Recipients' earnings

Statistical Model Specification

1. Statistical analyses: Our analyses consider two main approaches.
 - a. Pairwise treatment comparisons: As a test of our hypotheses, we plan to conduct parametric (e.g., z-test and t-test) and non-parametric tests (e.g., Kolmogorov-Smirnov test, Fisher's exact test, Wilcoxon rank-sum test, Wilcoxon signed-rank test) to check for differences in outcome variables across treatments.
 - b. Regression analyses: Both as a test of our hypotheses and for robustness checks, we plan to run ordinary least squares and Tobit regressions (for dictators' behavior/ censored continuous outcome variables) and Probit regressions (for recipients' behavior/ binary outcome variables). We will consider models both with and without control variables.
2. Main treatment variables: We have two key treatment variables.
 - a. For analysis of dictators' behavior:
recip_pride = 1 if matched recipient's ID has a Pride flag
 - b. For analysis of recipients' behavior:
id_first = 1 if the recipient constructed their ID first before receiving instructions about the dictator game
3. Control variables: We plan to include the following control variables in our regression analyses.
 - a. For analysis of dictators' behavior:
 - recip_perc_nonhetero = 1 if the dictator believes the recipient to be non-heterosexual.
 - recip_perc_ally = 1 if the dictator believes that the recipient identifies as an ally to the LGBTQ+ community
 - recip_perc_female = 1 if the dictator believes that the recipient is female

- recip_perc_trans =1 if the dictator believes that the recipient is trans/non-binary/other
- recip_perc_conservative: dictator's belief about how conservative the recipient is on social issues
- recip_perc_age: dictator's belief about the recipient's age group
- own_nonhetero =1 if the dictator identifies as non-heterosexual (according to their Prolific profile)
- own_allyship =1 if the dictator identifies as an ally to the LGBTQ+ community
- own_female =1 if the dictator identifies as female
- own_trans =1 if the dictator identifies as trans/nonbinary/other
- own_conservative: dictator's level of conservatism on social issues
- own_age: dictator's age
- own_educ: dictator's highest education qualification attained
- own_ethn_white: dictator is White
- own_ethn_black: dictator is Black/ African American
- own_ethn_native: dictator is American Indian/ Alaskan Native
- own_ethn_asian: dictator is Asian
- own_ethn_islander: dictator is Native Hawaiian/ Pacific Islander
- own_ethn_latino: dictator is Hispanic/ Latino
- own_ethn_arab: dictator is Middle Eastern/ Arab
- own_religion: dictator's religious affiliation
- own_lgbt_views: index for dictator's view on LGBTQ+ issues (constructed based on their sentiments to a series of statements in the survey)
- own_lgbt_interact: how frequent does dictator interact with an LGBTQ+ person
- own_lgbt_friend = 1 if dictator has a close friend/family who identifies as LGBTQ+
- own_incon_relations = 1 if the dictator identifies as heterosexual (non-heterosexual) but has had sexual relations with someone of the same (a different) gender
- own_incon_attraction = 1 if the dictator identifies as heterosexual (non-heterosexual) but has been sexually attracted to or had sexual fantasies about someone of the same (different) gender
- iat_score: dictator's IAT score

b. For analysis of recipients' behavior:

- own_nonhetero =1 if the recipient identifies as non-heterosexual (according to their Prolific profile)
- own_allyship =1 if the recipient identifies as an ally to the LGBTQ+ community
- own_female =1 if the recipient identifies as female
- own_trans =1 if the recipient identifies as trans/nonbinary/other
- own_conservative: recipient's level of conservatism on social issues
- own_age: recipient's age

- own_educ: recipient's highest education qualification attained
- own_ethn_white: recipient is White
- own_ethn_black: recipient is Black/ African American
- own_ethn_native: recipient is American Indian/ Alaskan Native
- own_ethn_asian: recipient is Asian
- own_ethn_islander: recipient is Native Hawaiian/ Pacific Islander
- own_ethn_latino: recipient is Hispanic/ Latino
- own_ethn_arab: recipient is Middle Eastern/ Arab
- own_religion: recipient's religious affiliation
- own_lgbt_views: index for recipient's view on LGBTQ+ issues (constructed based on their sentiments to a series of statements in the survey)
- own_lgbt_interact: how frequent does recipient interact with an LGBTQ+ person
- own_lgbt_friend = 1 if recipient has a close friend/family who identifies as LGBTQ+
- own_incon_relations = 1 if the recipient identifies as heterosexual (non-heterosexual) but has had sexual relations with someone of the same (a different) gender
- own_incon_attraction = 1 if the recipient identifies as heterosexual (non-heterosexual) but has been sexually attracted to or had sexual fantasies about someone of the same (different) gender
- prolific_perc_liberal: recipient's belief of the percentage of Prolific population who are politically more liberal than conservative on social issues than the general US population
- prolific_perc_conservative: recipient's belief of the percentage of Prolific population who are politically more conservative than liberal on social issues than the general US population
- prolific_perc_female_more = 1 if the recipient believes the Prolific population consists of more females than the general US population
- prolific_perc_female_less = 1 if the recipient believes the Prolific population consists of fewer females than the general US population
- prolific_perc_lgbt_more = 1 if the recipient believes the Prolific population consists of more LGBTQ+ individuals than the general US population
- prolific_perc_lgbt_less = 1 if the recipient believes the Prolific population consists of fewer LGBTQ+ individuals than the general US population
- belief_amt_diff: difference in beliefs about the average amount given to recipients with a Pride flag versus those with a non-Pride flag

Covariates Subgroup Analysis / Heterogeneous Treatment Effects

Dictator's behavior:

We plan to investigate heterogeneous treatment effects across subgroups identified using the following variables:

- Dictator’s sexual orientation
- Dictator’s gender
- Dictator’s LGTBQ+ allyship status
- Dictator’s political leaning on social issues
- Dictator’s religious affiliation
- Dictator’s highest education qualification attained

Recipient’s behavior:

We plan to investigate heterogeneous treatment effects across subgroups identified using the following variables:

- Recipient’s sexual orientation
- Recipient’s gender
- Recipient’s LGTBQ+ allyship status
- Recipient’s political leaning on social issues

Robustness Checks and Exclusion Criteria

1. Within-subject versus between-subject treatment comparison

Our main analysis of dictator’s giving behavior will include both heterosexual and non-heterosexual recipients per dictator, which therefore gives a within-subject treatment comparison. However, treatment effect may be muted in the presence of experimental demand effect, which would be exacerbated under a within-subject design. We therefore consider the following robustness checks.

First, we will consider dictator’s behavior toward their first recipient only (which is either heterosexual or non-heterosexual, randomly determined), thereby giving us a between-subject treatment comparison.

Second, under a within-subject comparison, we will control for the order in which dictators are paired with heterosexual versus non-heterosexual recipients.

2. Sexual orientation of dictators and recipients

We plan to recruit participants based on their self-reported sexual orientation (non-heterosexual and heterosexual) on their Prolific profiles. For non-heterosexual individuals, we will restrict our recruitment to those who self-identify as homosexual on their profiles.

As robustness checks of our main findings, we will consider alternative definitions of sexual orientation and LGTBQ+ allyship based on subjects’ responses to our survey questions.

3. Sexual orientation and flag choice

We will also examine the robustness of our flag choice component. We will study whether LGTBQ+ individuals and LGTBQ+ allies are more likely to choose the pride flag, and

whether their flag choice is effective in communicating information about their LGBTQ+ identity (or allyship) to other individuals. We will do this by using the recipient data collected in the ID-First treatment.

First, we will compare the flag decisions across recipients with different sexual orientations and gender identity. We expect non-heterosexual recipients (e.g., homosexual, bisexual, transsexual individuals, etc.) to be significantly more likely to choose the pride flag. We will examine this relationship by using the data from both the recipients' Prolific profiles and their survey responses.

Second, using the recipient's survey responses, we will compare the flag decisions across individuals who identify themselves as LGBTQ+ allies versus those who do not.

Third, using dictators' beliefs about their recipients' LGBTQ+ and allyship status, we will study whether recipients who chose the pride flag are more likely to be perceived by dictators to be an LGBTQI+ individual or an ally.

4. Color blindness

Our method of identifying LGBTQ+ individuals and allies involve the use of the pride flag, which consists of six horizontal strips of specific colors (red, orange, yellow, green, blue, and purple). The alternative non-pride flags also each consists of six horizontal strips of different colors (that were randomly chosen). As such, participants who are color blind may find it difficult to distinguish between the pride and non-pride flags.

To mitigate this issue, in our recruitment email, we plan to make it explicit that the study is not appropriate for participants who are color blind. In addition, in the post-experimental questionnaire, we will also ask participants to indicate if they suffer from color blindness.

As a robustness check of our main findings, we will restrict the analyses to subjects who have indicated that they do not suffer from color blindness.