

Healthy Habits Donation Study: Updated Modification, 18K Participants (#13847)

Created: 09/06/2018 08:24 PM (PT)

Public: 06/17/2020 01:08 PM (PT)

Author(s)

Erika Kirgios (University of Pennsylvania) - ekirgios@wharton.upenn.edu
Katherine Milkman (University of Pennsylvania) - kmilkman@wharton.upenn.edu
Edward Chang (University of Pennsylvania) - changed@wharton.upenn.edu

1) Have any data been collected for this study already?

It's complicated. We have already collected some data but explain in Question 8 why readers may consider this a valid pre-registration nevertheless.

2) What's the main question being asked or hypothesis being tested in this study?

See <https://aspredicted.org/blind.php?x=ux2mc4>

3) Describe the key dependent variable(s) specifying how they will be measured.

See <https://aspredicted.org/blind.php?x=ux2mc4>

4) How many and which conditions will participants be assigned to?

See <https://aspredicted.org/blind.php?x=ux2mc4>

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

See <https://aspredicted.org/blind.php?x=ux2mc4>

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

See <https://aspredicted.org/blind.php?x=ux2mc4>

7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.

The exact sample size will be determined by our field partner who is soliciting donations, but we estimate that we will be adding close to 12,000 new participants to our study, for a total of 18,000 participants. As explained in section 8, we will be using the O'Brien-Fleming correction for sequential analysis

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

As pre-registered at <https://aspredicted.org/blind.php?x=ux2mc4>, we have collected about 6,000 observations in this study. Since our study is a large field experiment, we estimated our effect size prior to launching without being able to pilot the study. After running the first ~6,000 participants and analyzing the data, we realized that our effect size was smaller than we had originally hypothesized, and we need more participants in our study. We ran bootstrap analyses with our data to estimate the power we would need to reliably detect this effect, and we realized that we would need about 18,000 participants total to detect our main effect 85% of the time with an alpha of .05, and to detect our hypothesized interaction 80% of the time with an alpha of .01. As a result, we decided to run 12,000 more participants to reach about 18,000 total participants. We will not check the data prior to its collection or stop running participants early. We are aware that checking the data early means we must correct the false positive rate accordingly. Specifically, we will use the O'Brien-Fleming correction for sequential analysis, so our corrected alpha threshold after we add these 12,000 new participants (when the total N = 18,000) is .0471.