Reminders Through Association & Prescription Adherence

NCT03697083

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1) Have any data been collected for this study already? No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?
H1: Individuals will be more likely to pick-up their prescription medication(s) when they are taught to use reminders through association compared to either control condition.

3) Describe the key dependent variable(s) specifying how they will be measured. At the beginning of the study, participants indicate the date they plan to pick up their prescription. Participants are later asked to text a picture of their prescription receipt to the experimenter after they complete the prescription reminder program. The receipt must satisfy three criteria:
1) The receipt must show that a prescription was purchased.
2) The receipt must show the date of purchase. This date of purchase must match the participant's intended pick up date.
3) The participant must write the word "End" on their receipt. Upon receiving the picture text, one research assistant will verify that the image of the receipt satisfies all three criteria.

Our primary dependent variable is binary taking the value one if the participant sends us a picture of their receipt that satisfies all criteria and taking the value zero if otherwise.

4) How many and which conditions will participants be assigned to?
Participants will be randomly assigned to one of three conditions.
In the Treatment Condition, participants will receive text messages prompting them to use the reminders through association approach to help them pickup their prescription.
In the Active Control Condition, participant will receive texts messages prompting them to think about where they will store their prescription.
In the Baseline Control Condition, participant will not receive text messages reminding them to pick up their prescription.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.
We will test H1 by examining differences in the rate of receiving participants' prescription receipts across conditions. All participants who were randomized to a condition will be included in the primary analyses.
Preferred test: two-sample proportion test comparing the proportion of participants picking up their prescriptions on time (our primary DV) between the Active Control Condition and the Treatment Condition.

We will use two-sample proportion tests to compare differences in our primary DV across Treatment Condition vs. Baseline Control Condition and Active Control Condition vs. Baseline Control Condition.
We will also run an OLS regression with our primary DV as the outcome, indicators for each condition as predictors, and controls for additional information collected as follows:
1. age (continuous)
2. gender (indicator for female)
3. The device used to enroll in the program (binary, 1=mobile device, 0=otherwise)
4. self-reported refill frequency (categorical)

5. self-reported medication type (categorical: a new medication, a refill, or both)
6. self-reported daily number of medications taken (continuous)
7. self-reported importance of the medication (7 -point Likert scale, continuous)

Participants have the option to leave controls 4, 5, 6, and 7 unanswered. We will include a dummy variable for each control variable flagging participant's failure to answer. Control variables will take the mean value of the variable when left unanswered.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.
No exclusions will be made.

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. We will launch a Facebook advertising campaign aiming to recruit ~1400 participants. The cost of Facebook advertising is not directly proportion to the number of participants recruited. We will spend $5,500 in Facebook advertising. If less than 1,200 are recruited, we will spend additional funds on Facebook advertising to reach the 1,200 threshold. These estimates were determined based on a pilot study using a Facebook advertising campaign.

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)
We ask participants what specific medications they plan to pick up. We collect this for exploratory purposes.