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On or Off Track: Study 4 (#38895)

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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?

Participants who have an intact streak (as shown in a 'tracker') of completing language learning questions on an app will be more likely to continue completing questions than participants who have a broken streak (as shown in a tracker). Participants who do not see a tracker (control condition) will fall between these two conditions.

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

Main DV: Choice between continuing to complete language learning questions (1) and watch a fun video (0) as their next activity.

Process measure: 11 items (on 1-not at all to 11-extremely/a great deal scales) to assess if maintaining the streak of completing questions became a goal. These items include 5 pertaining to sense of accomplishment, 5 pertaining to motivation to continue completing questions, and 1 item asking if they had a goal of maintaining their streak of completing questions. These will be averaged together to create 1 measure of sense of achievement.

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

3 (intact streak; broken streak; control) between subjects conditions, randomly assigned.

All participants complete 4 language learning questions on an app and are faced with the same choice DV, but either have all 4 logged on the tracker (intact streak), have 3 logged but the 4th is not logged (broken streak), or do not have a tracker (control).

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

We will conduct a binary logit with condition predicting choice. We anticipate a main effect of condition. We will also conduct separate chi square analyses with each pair of conditions to assess the effects of condition on choice. We expect the intact condition to choose continuing the language learning questions more than the broken streak condition, and for the control condition to fall between these two conditions.

We will also conduct a one-way ANOVA and separate t-tests to assess the effect of condition on 'sense of achievement', and anticipate a main effect of condition, wherein the intact streak condition feels greater sense of achievement than the broken streak condition, and the control condition falls between them.

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

We will exclude incomplete survey responses.

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.

Target N = 600. We will recruit 600 participants on MTurk.

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

We will conduct mediation analyses with condition as the IV, sense of achievement as the mediator, and choice as the DV. Our models will use the different combinations of conditions: a) intact streak (1) vs broken streak (0); b) intact streak (1) vs. control (0); c) control (1) vs. broken streak (0).

We will also conduct a one-way ANOVA and separate t-tests examining the effects of condition on a) the 5 accomplishment items averaged together; b) the 5 motivation items averaged together; c) those 10 items averaged together; d) just the streaks as a goal item.