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Choice Architecture and Warnings: Experiments in online credit card payments (#134247)

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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?
In experiment 1: What are the effects on credit card payment decisions of adding information and highlighting low or high costs?

In experiment 2: Are treatment effects of experiment 1 different for people with liquidity constraints?

Our main hypotheses are:
H1 - Credit card payment amounts increase when respondents receive general information about the consequences of "full payment," "minimum payment," and "other" payments relative to the baseline treatment.

H2 - Credit card payment amounts increase (decrease) when respondents receive customized warnings about the high (low) costs of unpaid amounts.

H3 - Treatment effects are heterogeneous across liquid and non-liquid constrained payment scenarios.

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

a) The amount of money indicated in the payment decision as a proportion of the available balance. It is important to consider that in Experiment 2 full payment is not possible due to liquidity constraints in the payment scenario.

b) The likelihood that people pay the full amount, the minimum or other payment amounts.

c) Changes in payment decisions before and after receiving a warning.

4) How many and which conditions will participants be assigned to?
All participants will make two payment decisions. They are first presented with a general payment scenario that varies by treatment (two), and then they are provided with a warning (two treatment variations) and are asked if they want to reconsider their initial payment decision. Participants are assigned to one of four experimental conditions:

1 - Control-interest: without information about the consequences of each payment option. Respondents assigned to this group can reconsider their decision after a warning highlighting the interest costs of the payment decision.

2 - Control-debt: without information about the consequences of each payment option. Respondents assigned to this group can reconsider their decision after a warning highlighting the total debt costs of the payment decision.

3 - Information-interest: with information about the consequences of "full payment," "minimum payment," and "other" payments. Respondents assigned to this group can reconsider their decision after a warning highlighting the interest costs of the payment decision.

4 - Information-debt: with information about the consequences of "full payment," "minimum payment," and "other" payments. Respondents assigned to this group can reconsider their decision after a warning highlighting the total debt costs of the payment decision.

We use this design in two experiments that vary in terms of the information the participants receive regarding their credit card balance:
In experiment 1, participants are not given any information about the amount of money they have available to pay the bill and have no budgetary restrictions. This is the standard scenario for credit card payment experiments.

In experiment 2, participants are presented with a scenario in which they do not have enough money to pay the bill. They are forced to choose between making a "minimum payment" or deciding on an amount using an "other" payment option.

Respondents of experiment 1 were excluded from participation in experiment 2.

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

We will compare the main effect of "Control" vs. "information" treatments to examine H1, and the main effect of "Interest" vs. "Debt" treatments to examine H2. We will run linear regression models (linear probability models for dummy variables), as well as logit models and multinomial models for hypothesis testing.

We will use the first decision of participants that decide to pay the "Full Amount" as a baseline reference to compare other treatments-scenarios. It is especially interesting to evaluate if there are differences between the first and second decisions of people that decided to pay everything in decision one and could potentially pay less if they are asked to make a second choice.

For each experiment, we will examine treatment heterogeneity for gender, SES, financial literacy, psychological ownership and diminishing sensitivity.

Across experiments 1 and 2, we will evaluate differences based on liquidity constraints.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.
We will use observations for anyone that reaches the treatment section of the experiment, and provide observations on the dependent variable of interest.

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 desired sample size is 1000 per experiment, which is approx 250 per treatment, and a total of 2000 participants in the two experiments. The exact number is controlled by a third party, a market research company.

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