AICulpability_E15_Counterbalanced (#199161)

Author(s)
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Pre-registered on: 11/13/2024 09:32 AM (PT)

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 a previous study, we discovered that the marketing labels used for autonomous vehicles (AVs), specifically 'Autopilot' versus 'Copilot,' significantly influence the perceived level of automation. 'Autopilot' was associated with a higher level of perceived automation, which in turn led to increased ascriptions of liability and responsibility for both the firm and the AV in the event of an accident.
In this study, we aim to present the mediator variable at the end of the experiment, to test whether the effect is robust even in this situation. We predict that we will replicate the results from the previous study.

3) Describe the key dependent variable(s) specifying how they will be measured.
The dependent variables in this study are:
1. What do you perceive as the level of automation for Aeon's [label] Program?
2. Aeon's [label] is responsible for the accident.
3. The human in the car is responsible for the accident.
4. Aeon, the company, is liable for the damages from the accident.
5. The human in the car is liable for the damages from the accident.
For (1), we will measure the perceived level of automation of the autonomous vehicles on 6-point scale with endpoints, 1 – Level 1 automation (not automated at all) and 6 – Level 6 automation (fully automated). For (2) - (5), participants will be asked to rate the extent to which they agree with the statements, presented in randomized order, on a scale from 0 = "Strongly Disagree" to 100 = "Strongly Agree."
We will first ask questions (2) through (5) and then ask question (1) to avoid any potential priming effects from question (1).

4) How many and which conditions will participants be assigned to?
There will be two conditions (label: Autopilot vs. Copilot) and participants will be randomly assigned in a between-subjects design.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.
If the measures of human liability have a Cronbach's alpha of 0.7 or higher, we will average these measures to form a composite measure. The same procedure will be applied to the measures of firm liability.
We will conduct t-tests to compare the differences between conditions for all dependent variables. Additionally, we will perform two simple mediation analyses, where the dependent variables are human liability and firm liability, the mediator is the perceived capability of the software, and the independent variable is the label assigned to the software.

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.
We will exclude participants who answer any one of the three comprehension check questions incorrectly.

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 apply a Pre-Registered Interim Analysis Design (PRIAD), specifically utilizing the two-stage Pocock design as described by Andre and Reinholtz (2024). Initially, we will gather data from 500 participants. If the measures and mediation effect yield a p-value below 0.0294, we will discontinue further data collection. Otherwise, we will continue to reach a full sample of 1,000 participants.

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)
Only participants who pass two attention checks at the beginning of the survey will be eligible. We will include some demographic questions but nothing identifiable (age, gender). We will also ask participants how familiar they are with AI on a 100-point scale with endpoints, 0- Very little and 100- A lot.