

## VIVA 2.2 Influence of choice of privacy settings on attitudes towards VIVA (#62941)

Created: 04/08/2021 05:08 AM (PT)

Public: 04/07/2022 02:12 AM (PT)

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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 this online experiment, one group will evaluate a robot with self-chosen privacy settings (choice condition). The other group will evaluate a robot with preset privacy settings (no choice condition).

H1: Robot likeability is higher in the choice condition than in the no choice condition.

H2: Trust towards the robot is higher in the choice condition than in the no choice condition.

H3: Contact Intentions towards the robot are higher in the choice condition than in the no choice condition.

H4: Subjective Ambivalence is lower in the choice condition than in the no choice condition.

H5: Objective Ambivalence is lower in the choice condition than in the no choice condition.

H6: a) Depth of self-disclosure, and b) breadth of self-disclosure are higher in the choice condition than in the no choice condition.

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

Likeability (six items, five items adapted from Reysen, (2005) and one item from Salem et al., 2013)

Trust (four items adapted from Touré-Tillery & McGill, 2015)

Contact Intentions (five items adapted from Eyszel & Kuchenbrandt, 2012)

Objective Ambivalence (two items adapted from Thompson, Zanna & Griffin, 1995)

Subjective Ambivalence (three items adapted from Priester & Petty, 1996)

Depth of self-disclosure (one self-generated item asking for the preferred level of intimacy of a potential conversation (1 = not at all intimate 7 = very intimate)

Breadth of self-disclosure (one self-generated item asking for the subjective length of a potential conversation (1 = as short as possible to 7 = as long as possible)

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

Participants will be assigned to one of two conditions (choice vs no choice condition).

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

7 independent one-sided t-tests: IV: Choice Condition, DV: Likeability (H1) or Trust (H2) or Contact Intentions (H3) or Subjective Ambivalence (H4) or Objective Ambivalence (H5), or Depth of Self-Disclosure (H6a) or Breadth of Self-Disclosure (H6b)

To prevent alpha error cumulation, we will adjust the alpha level to  $.005/7 = .007$

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

Incomplete responses, participants who indicate not having participated meticulously, participants who indicate not speaking German fluently, and participants who indicate having participated in the previous study on robot privacy settings will be excluded.

### 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.

192 (power analysis with G\*power for a t-test with 80% power, alpha = .007, d = .05)

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

As a manipulation check, we assess the perceived privacy risks with 5 items, adapted from the subscale "risk beliefs" from a larger scale measuring internet user's information privacy concerns (Malhotra, Kim & Agarwal, 2004).

For exploratory purposes, we will repeat the main analysis as ANCOVAS with technology commitment as a covariate (eight items, adapted from Reich-Stiebert & Eyszel, 2015).

We further assess Personal Beliefs in a Just World (PBJW) with 7 items (Dalbert, 2002). We hypothesize that participants in the choice condition score lower on PBJW than participants in the no choice condition.

We further investigate correlations of the dependent variables with personality variables such as loneliness (five items, Lamm & Stephan, 1986) and Technology Commitment (eight items, adapted from Reich-Stiebert & Eyszel, 2015), risk beliefs, and PBJW.