Complex decision-making could be facilitated by social modulation through repetition and emotional priming

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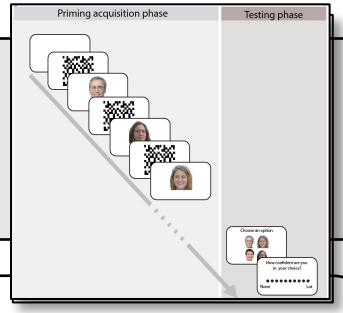
INTRODUCTION

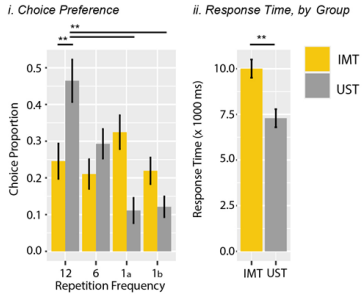
Some decision-making (DM) processes require quick answers, while more complex decisions demand greater cognitive engagement. Under the hypothesis that frequent exposure to a stimulus (repetition priming) or its association with an emotional valence (emotional priming) could drive DM, online experiments were conducted. To compare results in a more ecological situation (Social Study), online social surveys were conducted during the 2019 Argentine Presidential Elections, as well as written media news were scraped to assess each candidate's mention frequency and sentiment analysis.

METHODS

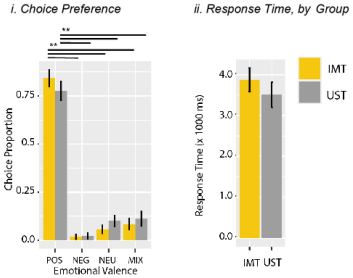
Cognitive experiments involved a computer task where participants had to choose a face from 4 options, each of them was associated with different frequencies (EXP#1) or with positive, negative, neutral, or mixed sentences (EXP#2). Two experimental groups were assessed: the 1st group was asked to choose a face without any specification (NST); and the 2nd one for an important task (IT).



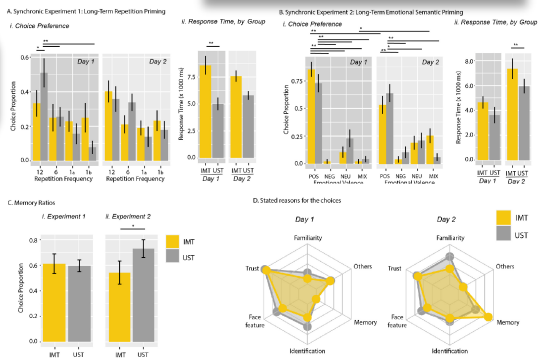
RESULTS: COGNITIVE EXPERIMENTS



EMOTIONAL PRIMING (EP)
The faces with a positive association were significantly more chosen than others, in both groups



REPETITION PRIMING (RP)
The most repeated face was significantly more chosen in the NST group, involving significantly greater response time



LONG-TERM EFFECTS
No effect of RP was observed at 24hrs, but EP did, although it showed a decline in strength.

See also poster B02 on Poster Session B March 16 at 18:30 (GMT+1)

DISCUSSION

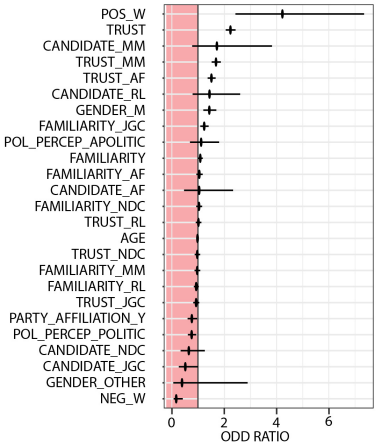
These results support our hypothesis and suggest that complex decision-making susceptibility to repetition or emotional priming could depend on the relevance of the involved task.

METHODS

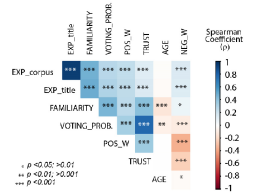
Online surveys were conducted during the 2019 Argentine Presidential Elections, and written media news were scraped to estimate each candidate's mention frequency and sentiment analysis. Familiarity (F), Trust(T), and Voting Probability(VP) for each candidate were obtained from the surveys, as well as the main means used by the participants to inform themselves about the candidates.

RESULTS: SOCIAL STUDY

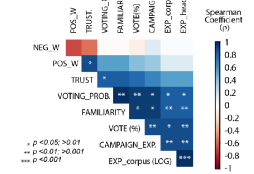
A. ODD ratios of significant explanatory variables (PERIOD#2)



B. PERIOD#2 Variables Correlation Matrix



C. Cross-Correlation Matrix



T and F mostly explain the VP variance; in a cross-analysis between variables and for different candidates, T was found to correlate better (than F) with VP but both were significant in most analyses. Besides, F, T, and VP for each candidate correlate significantly with the frequency of mentions, the positive association, and election results.

See also poster B17 on Poster Session B March 16 at 18:30 (GMT+1)

FILLIATION

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