**Design of the Experiment**

**Between-subjects design:**

**Design**: 2 (*US-CS color*: same vs. different) x 2 (*EC condition*: CS1-US+ vs. CS2-US-) within subject design. Method factors varied between participants:

* + - *Stimulus assignment*: CS1/CS2 identity assigned to same color as positive/negative words
    - *Order of measures*: IAT first vs. after self-reports
    - *IAT block order* (consistent vs. inconsistent with learning phase).
* EC 🡪 Evaluative measures 🡪 Exploratory Questions

- Stimulus:

Two nonsense words (MORAG and STRUAN) will serve as CS1 and CS2.

Six positive (Rainbow, pleasure, smile, love, paradise, joy) and six negative adjectives (war, cancer, hate, hell, misery, vomit) will serve as USs.  
**Participants:**

Data-collection will be via the Prolific website (prolific.achttps://prolific.ac/). We will stop data-collection as soon as XX participants have completed the experiment on the Prolific website. This will allow us to have good power (> 0.80) to observe a difference (*d* = 0.50) between the two color conditions at alpha = 0.05.

**Procedure:**

**EC training phase**: Participants receive three blocks of 16 trials (48 total) consisting of two different types of trials: one type of trials wherein CS1 is presented in the same color as positive words, and another trial in which CS2 is presented in the same color as negative words. Note that each trial will contain three stimuli simultaneously presented onscreen: a neutral word (MORAG or STRUAN) and a positive and negatively valenced adjective. All three stimuli will initially be presented in white. Then after 3000ms the CS will change to one color (e.g., blue). Depending on the CS present on that trial, one US will also turn that same color (e.g., blue) whereas the other will change to a different color (e.g., purple). The stimuli will remain onscreen for another 3000ms before all stimuli being removed, an inter-trial interval of 1250ms and the next trial.

*Same Color (CS1 trial) Same Color (CS2 trial)*

**MORAG JOY STRUAN HELL**

**SMILE**

**Cancer**

IAT

1. Participants perform an IAT measuring implicit evaluations of CS1 vs. CS2:   
   The IATs involve categories “CS1”[“CS3”] and “CS2” [“CS4”] and “Good” and “Bad”  
     
   IAT Procedure:

a. Instructions: “In In the next part you will have to categorize items into groups as fast as you can.”

b. 20 practice trials sorting CS1 and positive words using one key.   
  
c. 20 practice trials sorting CS2 and positive words using one key.

d. 20 test trials CS1 and positive words using one key.

e. 40 test trials CS2 and positive words using one key.

f. 20 test trials CS1 and positive words using one key.

g. 40 test trials CS2 and positive words using one key.

NOTE: IAT stimuli are:

|  |  |
| --- | --- |
| CS1 |  |
| CS2 |  |
| Positive | /1 = "Fantastic"  /2 = "Great"  /3 = "Nice"  /4 = "Good"  /5 = "Pleasant"  /6 = "Wonderful"  /7 = "Amazing"  /8 = "Happy" |
| Negative | /1 = "Terrible"  /2 = "Disgusting"  /3 = "Nasty"  /4 = "Horrible"  /5 = "Sick"  /6 = "Awful"  /7 = "Sad"  /8 = "Unpleasant" |

1. Participants give explicit ratings for the two CSs by answering the question:

*“Please rate the above item using the scale below*  
options: -5 =Negative, 5= Neutral, +5= Positive

options: -5 =I Dislike it, 5= Neutral, +5= I Like it

options: -5 =Bad, 5= Neutral, +5= Good

options: -5 =Unpleasant, 5= Neutral, +5= Pleasant

4. Participants are presented with two brand products labeled with either CS1 or CS2. They are asked to indicate which of these products they would try and given the following options: “I would try CS1, I would try CS2, I would try CS1 and CS2, I would try neither, I don’t know”.

5. Finally, participants answer the following questions about the EC task:  
  
 Contiguity memory: CS1, CS2, was presented onscreen and participants asked: “In the first part of the experiment (when words appeared initially in white and then switched their color) was MORAG/STRUAN presented together with.”

"positive words only", "negative words only", "both positive and negative words", "neither positive or negative words" "I don’t remember")

6a. Color memory 1: CS1, CS2, was presented onscreen and participants asked: “In the first part of the experiment (when words appeared initially in white and then switched their color) did MORAG/STRUAN switch to”

("The same color as positive words", "The same color as negative words", "I don’t remember")

7. Manipulation check to ensure that participants did not write down the contingencies during the learning phase: “Think back to the first part of the experiment (i.e., when three words were paired onscreen). Did you ever take notes (or write down) what happened in order to help you figure out what was going on? Please be honest here (you will receive payment regardless of what you say).”

8. Demand Compliance (explicits): Earlier you rated MORAG and STRUAN as being either positive, neutral, or negative. Did you base your ratings NOT on how you actually felt about those words but ONLY on what you thought the researchers wanted you to say?"

("Yes", "No", "I don’t know")

Demand compliance (implicits). Earlier you completed the Implicit Association Test (see below). Did you base your performance in that task NOT on your best efforts to perform the categorizations as quickly and accurately as possible but on your attempt to influence your speed or accuracy in order to go along with what you thought the researchers wanted you to feel about the words?

("Yes", "No", "I don’t know")

9. Reactance. (Explicits). Earlier you rated MORAG and STRUAN as being either positive, neutral, or negative. Did you consciously resist what you thought the researchers wanted you to feel about those words?"

("Yes", "No", "I don’t know")

Reactance (implicits). Earlier you completed the Implicit Association Test (see below). Did you try to influence your speed or accuracy in order to consciously resist what you thought the researchers wanted you to feel about those words"

("Yes", "No", "I don’t know")

Hypothesis awareness. During the first part of the study, did you notice that the color of MORAG and STRUAN switched to the same color as either positive or negative words? Please be honest here"

Influence awareness. Did this influence how you responded to MORAG and STRUAN? Please be honest here"