

Emotional Free Recall Task with EEG integration

- Spanish

Description

This is a Spanish Emotional free recall task (EFRT) developed for a research project conducted in a collaboration between the neurocognitive laboratory and the Psychosocial laboratory at Ponce Health Sciences University. This project compares people with a history of suicidal behavior vs a control group (no history of suicidal behavior) on this and other tasks.

The EST was developed using Psychopy 3 builder but includes code components. It can't be run with Psychopy 2 because it uses Unicode characters (i.e., words with accents) and Psychopy crashes with this sort of stimuli or doesn't display it correctly. It includes practice and experiment trials.

The Free recall task consists of presenting "lists" of words to the participant and then asking the participant to recall as many as possible.

This task was adapted to be used with an EEG. Triggers are sent with each words and the trigger label for each condition is specified in the stimuli file in the column trigger. The correspondence between trigger and condition is as follow:

- 1 = negative
- 2 = neutral
- 3 = positive

Practice trials

The EFRT includes a single practice trial. The trial consists of a list of 15 words(i.e., name colors) that participants have to remember at the end of the trial. Words are presented individually on the screen for two seconds each. The participant must type the words they remember, separated by spaces.

Practice trial structure

- instructions
- fixation cross for 1 sec
- blank screen for .5 secs
- each word is presented for 2 seconds
- participant types all the words he or she remembers

Experimental trials

A total of 150 words will be presented to the participant. The words are from three different valence: positive, negative, and neutral. Just as in the practice trials, words are presented individually on the screen for two seconds each and the participant must type the words that he or she remembers, separated by spaces.

Participants are allowed 3 breaks to rest (one rest after completing every 3 blocks. The participant continues by pressing a key.

Experiment trial structure

- instructions
- fixation cross for 1 sec
- blank screen for .5 secs
- each word is presented for 2 seconds
- a trigger is sent to the EEG
- participant types all the words he or she remembers

Technical details about blocks

- Words are organized into blocks (lists) to get semi-randomization:
 - 10 lists
 - Each list has 15 words: 5 words from each valence

The following table represents one block:

text	condition	list
negative1	negative	1
negative2	negative	1
negative3	negative	1
negative4	negative	1
negative5	negative	1
neutral1	neutral	1
neutral2	neutral	1
neutral3	neutral	1
neutral4	neutral	1
neutral5	neutral	1
positive1	positive	1
positive2	positive	1
positive3	positive	1
positive4	positive	1
positive5	positive	1

Contact

If you have any questions don't hesitate to contact me at mbermonti@psm.edu.
If you find any errors or bugs, please open an issue and I'll work on it as soon as possible.