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Raw data from experiment 1, 2, and 3 from Jozefowiez, Urcelay, and Miller

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The three folders contain the raw data from Experiment 1, 2, and 3 from Jozefowiez, Urcelay, & Miller. The present document describes the structure of the files to allow someone who would want to reanalyse the data to do so. If this information proves insufficient, contact Jérémie Jozefowiez at jeremie.jozefowiez@univ-lille.fr.

Experiments 1 and 2

The folders for the two onsite experiments (Experiment 1 and 2) have the same structure. They contain the Python program used to run the experiments (it requires the Psychopy library though it might not be compatible with the latest version of Psychopy; it will work with Psychopy 2), an instruction folder containing resources used by the program (notably, image files containing the instructions), and a folder containing the raw data.

Each text file in the Data folder is a participant. Each file has the same structure. It starts with two lines indicating the name of the program used to generate the data file (corresponding to the program ID field in the program) and the identifiers for the participant (id, age, and gender). Then, each line corresponds to a stream. The first field is the name of the condition, the second one is the response of the participant to the contingency question (0 = YES, 1 = NO), and the third is the confidence rating (0 = NOT SURE, 1 = SURE, 2 = VERY SURE).

For Experiment 1, the correspondence between the name of the conditions in the data file and their name in the manuscript is as follows: CtrPlus = Control-Positive; CtrMinus = Control-Negative; IntPlus = Interference-Positive; IntMinus = Interference-Negative.

For Experiment 2, the correspondence between the name of the conditions in the data file and their name in the manuscript is as follows: CtrPlus = Control-Positive; CtrMinus = Control-Negative; IntPlus = Interference-Positive; IntMinus = Interference-Negative; ExtPlus = Extintion-Positive; ExtMinus = Extinction-Negative.

Experiment 3

As the program for Experiment 3 was hosted on the Gorilla platform, it cannot be included here. In lieu, the Gorilla folder contains the resources used by the program. Notably, the Stimuli folder contains the instructions and the stimuli shown to the participant. The state table folder contains the EXCEL files used to pilot the program. The trainingPlus, trainingMinus, and warmUpTest file were used during the 3 phases of the WarmUp. The CtrPlus, CtrMinus, CCPlus, CCMinus, ExtPlus, and ExtMinus files correspond to the 6 conditions shown to the participants during the experimental phase. The correspondence between the name of the conditions in the data file and their name in the manuscript is as follows: CtrPlus = Control-Positive; CtrMinus = Control-Negative; CCPlus = Interference-Positive; CCMinus = Interference-Negative; ExtPlus = Extinction-Plus; ExtMinus = Extincton-Minus.

The data folder contains the raw data retrieved from Gorilla. As explained in the manuscript, the experimental session was divided in 3 groups of 10 6-stream blocks between which the participants were allowed to take a break. Each of the csv file contains the data for all the participants for each of these blocks (Block1A.csv and Block1B.csv for block 1, etc…). For a given block, there are two files (for instance, for the first block, Block1A.csv and Block1B.csv). A small modification to the program was made to correct the spelling of one of the instructions after a few participants were run. The files with the A tag were generated by that first version of the program, while the files with the B tag were generated with the second almost identical version of the program.

As Gorilla records all the events that took place during a session for all participants, the data files are massive, but most of it is useless. Hence, we have also included the Python

script we used to the retrieve the data. That script will generate an EXCEL file with each line corresponding to a participant and showing that participant's response (0 = NO; 1 = YES; ERROR = the participant did not respond in the 20-s time limit) to each stream sorted by conditions. For reference, the important information in the data files is as follows: the participant ID is in column 11; when the participant answers the contingency question the DISPLAY field (column 52) takes the value "predictionRating" while the SCREEN field (column 36) takes the value "Screen 1"; when this happens, the name of the condition is in column 58 while the response of the participant is in column 42.

The demoDataA and demoDataB contains the information about the participants for each version of the program. The relevant information can be retrieved using filters in EXCEL: the age-1 field corresponds to the age of the participant while the gender-1 field provides the gender information.