

Instructions

StojicOlssonSpeekenbrink_StrSel_CatEnv_Data.csv file is a dataset file containing responses from the experiment described in article **Stojic, H., Olsson, H., and Speekenbrink, M. (2016). Not everything looks like a nail: Learning to select appropriate decision strategies in multiple environments** published as a preprint at PsyArXiv (find it at osf.io/fma3p). We refer users to the article for all the details about the experimental design, experimental stimuli and analysis. Code used in the analysis, experimental software, as well as manuscript can be found at Open Science Framework repository at osf.io/3q5if.

File is in a comma separated values (CSV) format, with the first row being a header row with names of the variables. There are no missing values in the whole dataset. The data was minimally processed before being published on Figshare. Only variables that could potentially be used to identify the participants was removed.

The dataset contains 41 variables with 26088 observations in total. These are results of 43 individuals, from 504 to 744 observations per individual. The variables in the dataset are described in details below.

For any question not addressed here, contact the corresponding author, Hrvoje Stojic, at hrvoje.stojic-at-gmail.com.

Date: September 29, 2016

Licence

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Figshare issued a DOI for this dataset: 10.6084/m9.figshare.1585822. Please use this DOI as a reference if you publish something based on the dataset.

Code sheet

Description consists of three elements each separated by a hyphen, first being the exact name of the variable used in the dataset header, second element is a brief description of the variable while the third element is type of the variable.

1. **subjectID** - unique identifier of a participant in the experiment - string

2. **psychopyVersion** - version of Psychopy libraries used for running the experiment - string
3. **consent** - participant has signed the consent form or not - string
4. **gender** - gender of the participant, values: male, female - string
5. **age** - age of the participant in years - numeric, integer
6. **major** - participants major at the university, values: Economics & Business, Engineering, Humanities, Law, Other - string
7. **obj1no** - identifier of the item presented on the left side of the screen - numeric, integer
8. **obj1feat1** - value of first cue of the item presented on the left side of the screen - numeric, integer
9. **obj1feat2** - value of second cue of the item presented on the left side of the screen - numeric, integer
10. **obj1feat3** - value of third cue of the item presented on the left side of the screen - numeric, integer
11. **obj1feat4** - value of fourth cue of the item presented on the left side of the screen - numeric, integer
12. **obj1val** - value of the criterion of the item presented on the left side of the screen - numeric, float
13. **obj1photo** - filename of the picture used to illustrate the item presented on the left side of the screen - string
14. **obj2no** - identifier of the item presented on the right side of the screen - numeric, integer
15. **obj2feat1** - value of first cue of the item presented on the right side of the screen - numeric, integer
16. **obj2feat2** - value of second cue of the item presented on the right side of the screen - numeric, integer
17. **obj2feat3** - value of third cue of the item presented on the right side of the screen - numeric, integer
18. **obj2feat4** - value of fourth cue of the item presented on the right side of

the screen - numeric, integer

19. **obj2val** - value of the criterion of the item presented on the right side of the screen - numeric, float
20. **obj2photo** - filename of the picture used to illustrate the item presented on the right side of the screen - string
21. **randAlt1** - randomization variable identifying whether the first item of the pair from the experimental stimuli file will be placed on left side of the screen (value 1) or right side of the screen (value 2) - numeric, integer
22. **randAlt2** - randomization variable identifying whether the second item of the pair from the experimental stimuli file will be placed on left side of the screen (value 1) or right side of the screen (value 2) - numeric, integer
23. **randCue1** - randomization variable identifying with which label on the picture the first cue in both items from the experimental stimuli file will be associated (values: 1, 2, 3 or 4) - numeric, integer
24. **randCue2** - randomization variable identifying with which label on the picture the second cue in both items from the experimental stimuli file will be associated (values: 1, 2, 3 or 4) - numeric, integer
25. **randCue3** - randomization variable identifying with which label on the picture the third cue in both items from the experimental stimuli file will be associated (values: 1, 2, 3 or 4) - numeric, integer
26. **randCue4** - randomization variable identifying with which label on the picture the fourth cue in both items from the experimental stimuli file will be associated (values: 1, 2, 3 or 4) - numeric, integer
27. **randPhoto** - randomization variable identifying which type of picture will be presented, whether it is bugs in linear and sonics in nonlinear type of environment (value 0) or vice-versa (value 1) - numeric, integer
28. **phase** - phase of the experiment, either training phase where people receive feedback on their performance (value “train”), or test phase where people do not receive feedback (value “test”) - string
29. **trial** - the trial number the participant is in, there is a separate count for training phase and for the test phase - numeric, integer
30. **block** - the block number the participant is in, in training phase each 80 trials denote one block and total number of blocks might differ for different participants - numeric, integer

31. **envType** - information on type of environment used in the current trial, i.e. whether the criterion value was computed as a linear combination of available cues (value “L”) or a non-linear combination (value “NL”) - string
32. **compType** - information on type of pair used as stimuli, informative only for the test phase and trials in “nonlinear” environment, whether the left item is old or new and same information for the right item (values: old/old, old/new, new/old) - string
33. **correctItemID** - ID number of the item that has higher criterion value in the current trial - numeric, integer
34. **choice** - whether the chosen item was on the left side (value 1) or on the right side (value 2) - numeric, integer
35. **choiceItemID** - ID number of the item that the participant has chosen in the current trial - numeric, integer
36. **correct** - binary variable identifying whether the participant’s choice was incorrect (value 0) or correct (value 1) - numeric, integer
37. **feedback** - if probabilistic feedback is used then this variable indicates whether feedback differed than *correct* variable - numeric. integer
38. **timeChoice** - time duration in seconds from presentation of the stimuli until the participant clicked the button for choosing one of the two presented alternatives - numeric, float
39. **timeTrial** - time duration of the current trial in seconds, from presentation of the stimuli until the participant clicked the button to continue to the next trial - numeric, float
40. **totalEarning** - total number of experimental points earned up to that point - numeric, integer
41. **timeTotal** - total time spent in the experiment up to that point - numeric, float