

Experiment protocol from: *The Rokers*

INSTRUCTIONS: For each of the sections below, write in sufficient detail that someone else could take this document and run your experiment, without further input from you. You can replace the guidance notes with your answer. Do not exceed two pages for the main body of this document (use an appendix for a full list stimulus materials if you need to, but also give a clear sense of what the stimuli are in the main body of the text). Express everything in the future tense (bear in mind that, in your final report, you will need to convert this to the past tense).

Participants

We will test 25 participants, which is the maximum achievable in the time available. This experiment has sufficient power to detect medium-to-large effect sizes ($d_z = 0.58$). Participants will be drawn from those attending the PSYC520 (a second-year psychological research methods module) at Plymouth University.

Apparatus and materials

The experiment will be programmed in OpenSesame (Mathôt et al., 2012), and presented on various laptop computers. Stimuli will be presented in a black 16-point font on a white background, and responses will be collected using the laptop's keyboard. We'll use thirty word pairs of rare English words and their definitions, taken from Potts (2013).

Procedure

Participants will be told that they will be studying rare English words and their definitions in two formats. The order of the two encoding conditions (Study, Generate) will be counterbalanced between participants. Before each encoding coding, participants will read onscreen instructions stating they will see rare English words and they should try to remember the correct definitions, because there would be a test. The key instruction for each stage (which tells the participants to either study the words or guess the meaning) will be presented in red. All other text will be presented in black.

Each encoding condition (Study, Generate) will consist of one presentation of each of 15 different word pairs. In the Study condition, each word pair will be presented centrally for 17 seconds (e.g. *gadoid* = *fish*). The participants will simply study the words. In the Generate condition, the cue will be presented alone for 10 seconds (e.g. *gadoid*), along with the question "What do you think this word means?". Participants will be strongly encouraged to type a one-word definition, and their answer will appear below the question. The target will appear after 10 seconds, along with the cue, for a further seven seconds.

The test phase will immediately follow the encoding phase. All thirty cues from the encoding phase will be presented in random order. The question "What does this word mean?" will be presented beneath each cue, and participants will be strongly encouraged to type the correct target.

Each trial of the experiment was separated by a 3 second interval.

Ethical statement

The stimuli and procedures of this experiment are innocuous, and pose no risk to participants or experimenters. Participants will only be tested after giving informed consent, and they have the right to withdraw from the study at any point. Data will be stored anonymously.

References

- Mathôt, S., Schreij, D., & Theeuwes, J. (2012). OpenSesame: An open-source, graphical experiment builder for the social sciences. *Behavior Research Methods*, 44(2), 314-324.
- Potts, R. (2013). *Memory interference and the benefits and costs of testing*. University College London.

Appendix

The words, and definitions, we will use are as follows:

infamous	horrible
desman	mole
leggiadrous	elegant
peculate	embezzle
frond	leaf
roke	mist
subduce	withdraw
effulgent	shining
roil	billow
stanchion	support
intractable	unmanageable
limpid	clear
immure	imprison
subvention	grant
sprauncy	smart
stentorian	loud
inculcate	instil
recondite	hidden
gadoid	fish
achene	fruit
zamindar	landlord
rebarbative	repellent
lassitude	tiredness
succursal	branch
subluxation	dislocation
perpend	consider
trammel	impede
renitent	resistant
sodality	fellowship
esculent	edible
opprobrium	disgrace
blandish	flatter
superate	overcome
orotund	pompous
inimical	hostile
imprecation	curse