

## Original Study Patterns

(Original Study Patterns.xlsx)

This contains the original 32 randomly generated patterns used in Experiments 1 and 2 the 1<sup>st</sup> column indicates the code number for that pattern and the following 16 columns indicate which cells were black (1) or white (0) in the displayed 4x4 pattern:

Cell 1	Cell 2	Cell 3	Cell 4
Cell 5	Cell 6	Cell 7	Cell 8
Cell 9	Cell 10	Cell 11	Cell 12
Cell 13	Cell 14	Cell 15	Cell 16

## Demographics Data

(Experiment 1 Demographics Data.xlsx, Experiment 2 Demographics Data.xlsx)

These contain the participant numbers, counterbalancing versions, age and gender of each participant.

Note: Participant 100 generated the PPR data for Participant 1 In experiment 1.

## Raw Data

(Experiment 1 Raw Data.xlsx, Experiment 2 Raw Data.xlsx)

Within each participant's data rows from top to bottom correspond to time earlier to later respectively – the ordinal position of trials is therefore available.

### Columns

Participant – Participant number and version

Study\_Pattern\_Code – This is the original pattern studied (see Original Study Patterns.xlsx), or the original pattern that lead to the PPR data (see below)

Study\_Pattern – This is the type of pattern studied, either an original pattern (random) or a recalled pattern from a previous participant (PPR). In Experiment 1 all PPR data was from instant tests. In Experiment 2 PPR data was from instant or delayed tests (see journal article for details)

Test\_Time – This indicates if there the test was instant or if there was a 15s delay between study and recall.

Study 1-16 – This is the pattern the participant studied, coded as outline in the *Original Study Patterns* section above.

Recall 1-16 – This is the pattern the participant recalled.

Correct 1-16 – This indicates which cells of the recalled pattern were correctly recalled (1) and which were not correctly recalled (0)

Prop\_correct – This is the overall proportion of correctly recalled cells

Notes: In Experiment 2, Participants 5 and 6 received incorrect versions of Pattern R25 and these rows are excluded: There was an error with one pattern missing (Pattern R25 PPR\_instant recall) due to no previous participants getting the instant version wrong. This occurred in versions 5,6,11 &12 of the experiment. Participants 5 and 6 experienced this anomalous pattern. The experiment was then fixed but for Pattern R25 there was only the random and PPR\_delayed versions. The PPR\_instant version of Pattern R26 was used to replace the missing PPR\_instant version of pattern R25 (the PPR\_delayed and random versions of Pattern R25 are still used). This preserved the participant analyses but all three levels are not present for items analysis of Pattern R25.