# Online supplementary material for

# Testing the automaticity of an attentional bias towards predictive cues in human associative learning

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**Online supplementary material #2**

In these experiments, trial order was not determined completely at random. In order to avoid long sequences of the same trial type (which might hinder learning), trials were divided into blocks. Within every block each trial type could be presented only twice, one presentation with one cue at the right side of the screen (and the other at the left) and another presentation with the reversed positions. The trial order was slightly more complex for Phase 1 of Experiment 1. This exception is explained in the current supplementary material.

**Experiment 1, Phase 1.**

Table #S1. Phase 1 structure.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Block 1.1 | Block 1.2 | Block 2.1 | Block 2.2 | Blocks 3-4 |
| *1 block × 8 trials* | *1 block × 8 trials* | *1 block × 8 trials* | *1 block × 8 trials* | *2 blocks × 16 trials* |
| p1+np1-R1  p1+np2-R1  p2+np1-R2  p2+np2-R2 |  | p1+np1-R1  p1+np2-R1  p2+np1-R2  p2+np2-R2 |  | p1+np1-R1  p1+np2-R1  p2+np1-R2  p2+np2-R2  p3+np3-R1  p3+np4-R1  p4+np3-R2  p4+np4-R2 |
|  | p3+np3-R1  p3+np4-R1  p4+np3-R2  p4+np4-R2 |  | p3+np3-R1  p3+np4-R1  p4+np3-R2  p4+np4-R2 |
| Block 5.1 | Block 5.2 | Block 6.1 | Block 6.2 | Blocks 7-16 |
| *1 block × 8 trials* | *1 block × 8 trials* | *1 block × 8 trials* | *1 block × 8 trials* | *10 blocks × 16 trials* |
| p1+np1-R1  p1+np2-R1  p2+np1-R2  p2+np2-R2 |  | p1+np1-R1  p1+np2-R1  p2+np1-R2  p2+np2-R2 |  | p1+np1-R1  p1+np2-R1  p2+np1-R2  p2+np2-R2  p3+np3-R1  p3+np4-R1  p4+np3-R2  p4+np4-R2 |
|  | p3+np3-R1  p3+np4-R1  p4+np3-R2  p4+np4-R2 |  | p3+np3-R1  p3+np4-R1  p4+np3-R2  p4+np4-R2 |

*Note:* ‘p’ and ‘np’ stands for predictive and non-predictive cues, as learned in the associative learning task (*AL task*). There were four predictive and four non-predictive cues, hence p1-p4 and np1-np4. All these stimuli were of different colour.

In Experiment 1, the full experimental design included 8 different trial types. We know from previous experiments that learning this task can be challenging for some participants. In order to make the learning easier, we decided to present this 8 different trial types in two sub-sets or ‘sub-blocks’ of trials, at least during the beginning of Experiment 1. For instance, as can be seen in Table S1, we presented only trials involving p1, p2, np1 and np2 in the first sub-block (Block 1.1). The second sub-block included trials with the rest of the stimuli (p3, p4, np3 and np4) (Block 1.2). We combined all trial types when the participants had been trained in such sub-blocks (please, see Table S1).