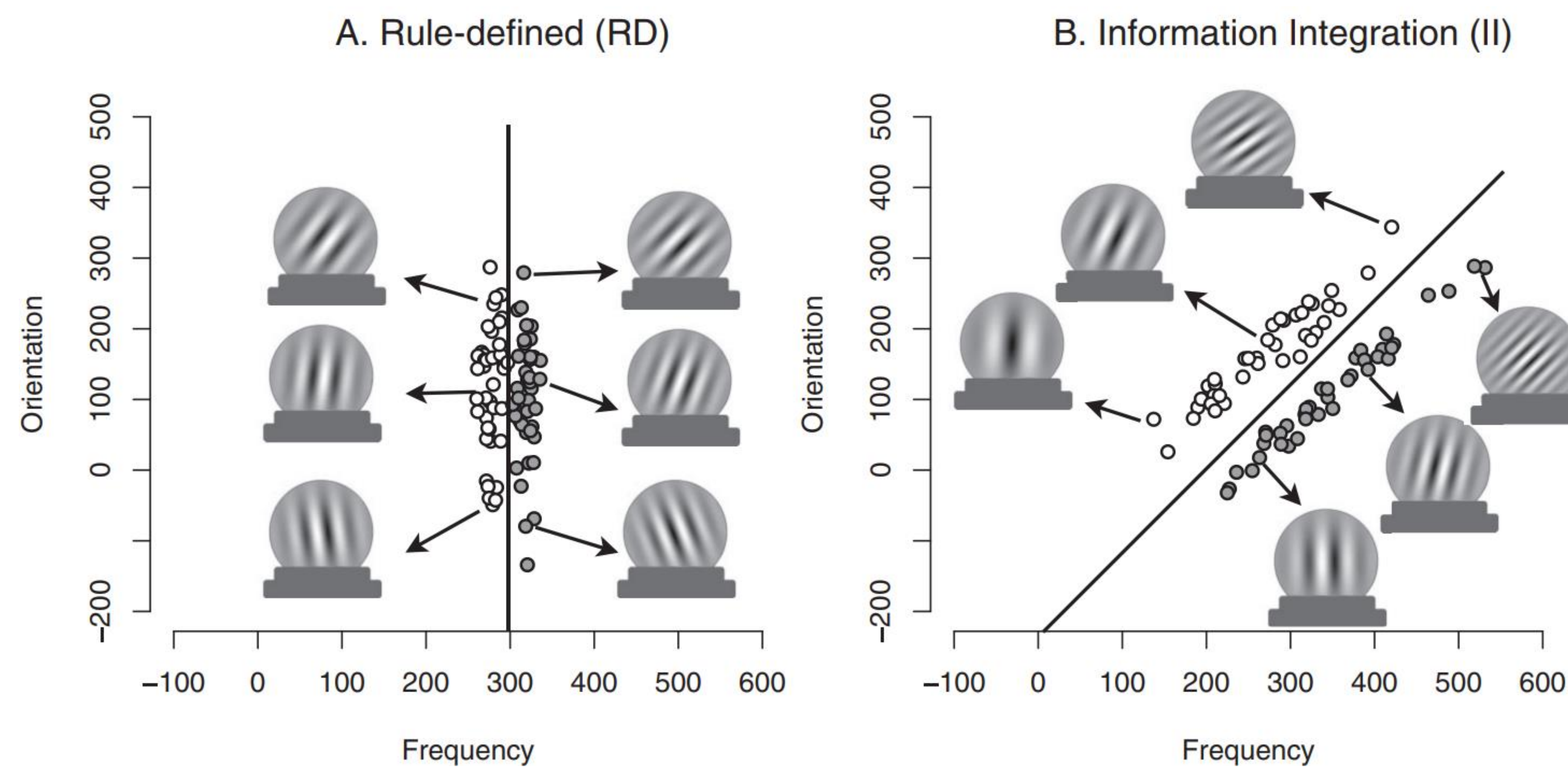


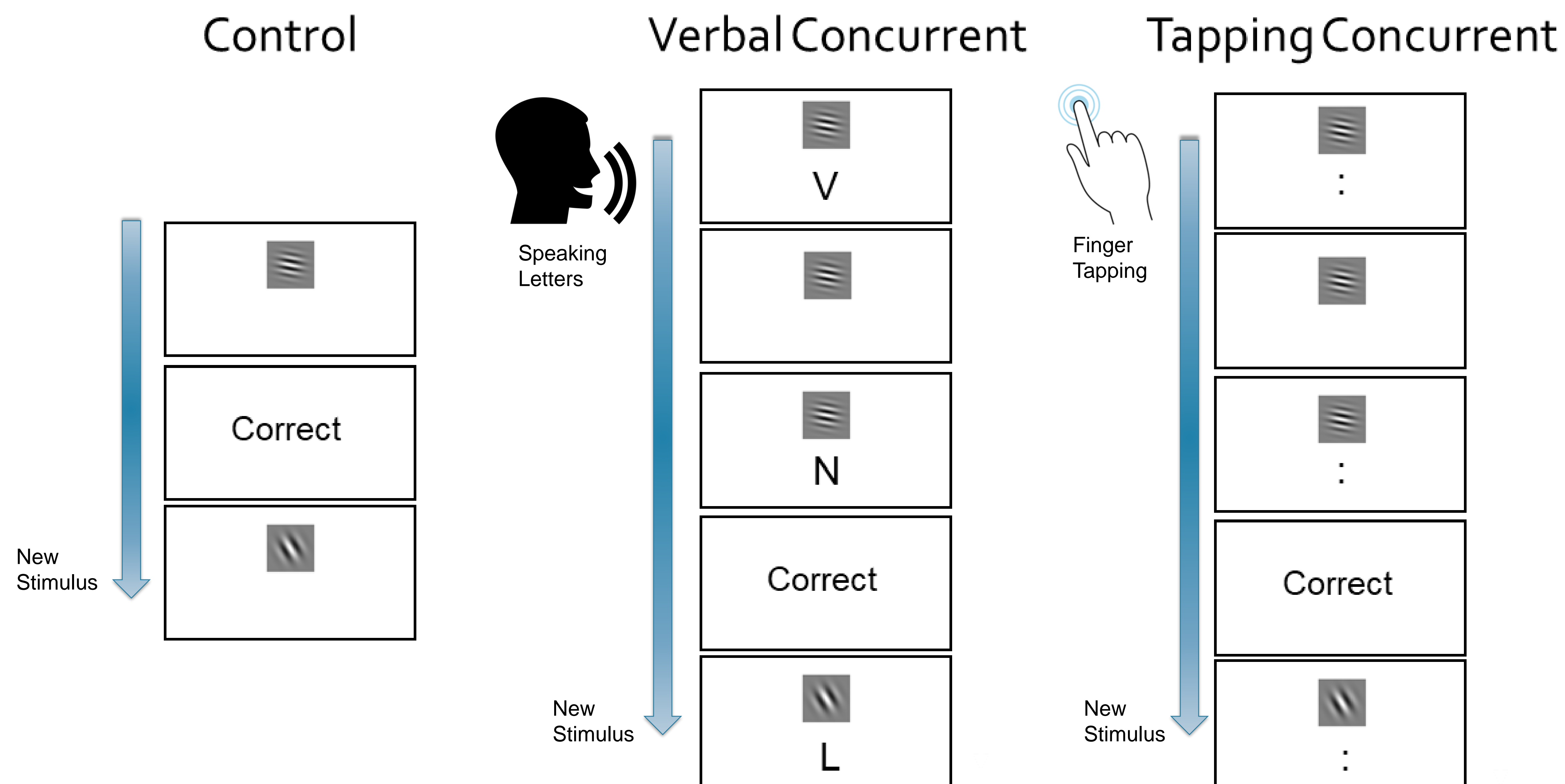
Introduction and Method

Hypothesis: Interfering with working memory or procedural memory will disrupt RD or II learning, respectively.

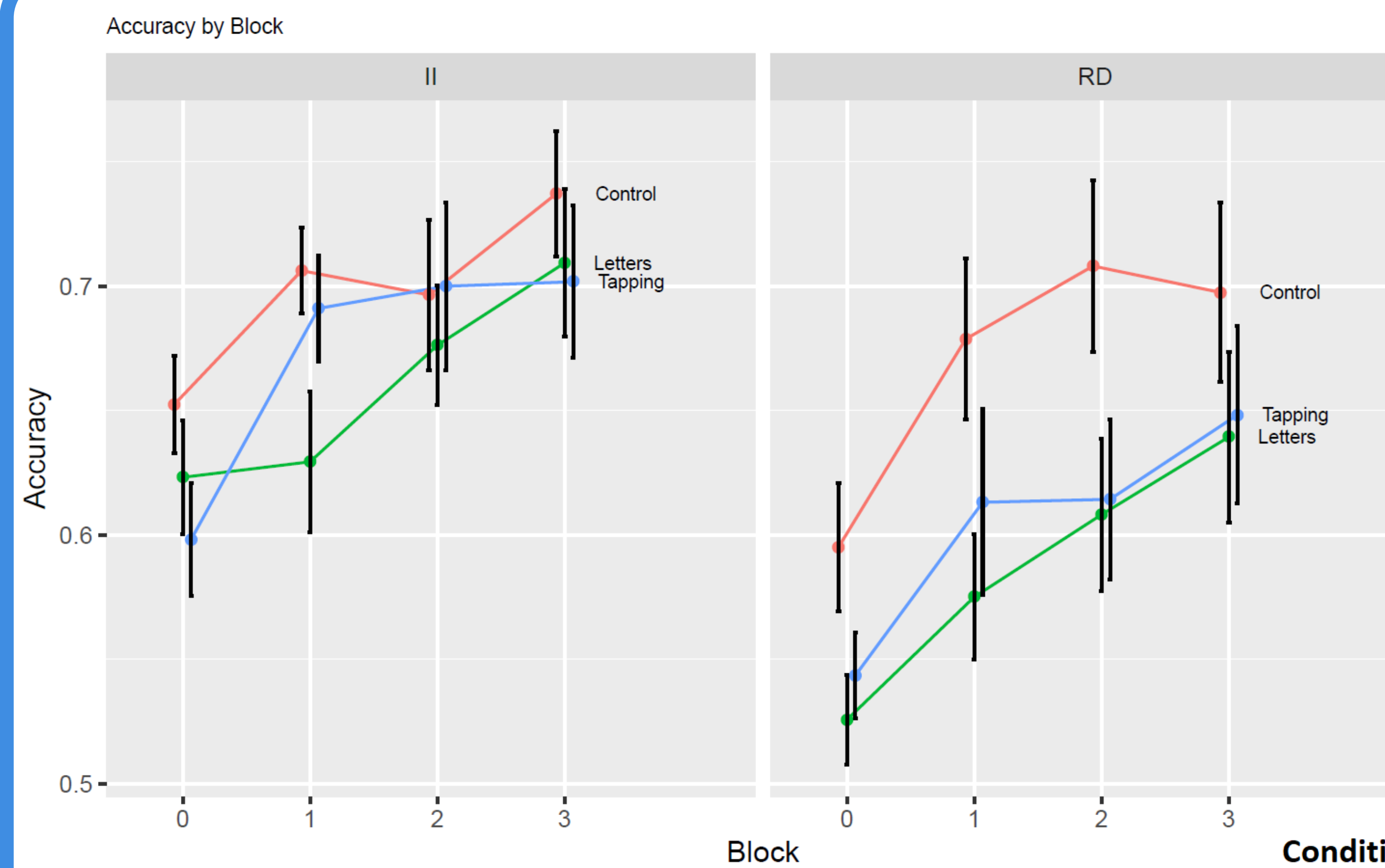
Stimuli: 80 Gabor Patches (40 Group 1, 40 Group 2):



Concurrent Task:



Results



Accuracy by Block

Main Effect of Category; $F(1,113) = 7.7995, p = 0.0061$

Main Effect of Block; $F(3,339) = 37.3797, p < 0.005$

RD Pairwise Comparison:

Comparison	Control	Letters
Letters	0.0011	NA
Tapping	0.0139	1

Modelling:

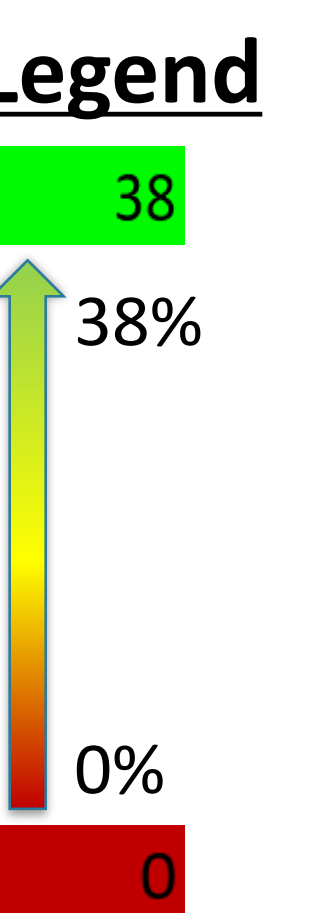
• **Information Integration Conditions:**

- Block 1, conditions were best described by either a II model, or a guessing model.
- By Block 4, all conditions were best modelled by an II Model.

• **Rule-Described Conditions:**

- Block 1, all conditions were best modelling by either RD or guessing Model.
- Block4, only Control best described by RD model.

Condition	Block	2D	Slope	Ori	II	RD	Guessing
IIControl	1	0	2.7	0	32.4	8.1	8.1
IIControl	4	0	8.11	2.71	32.4	2.7	2.7
IILetters	1	0	4.8	0	26.8	0	17.1
IILetters	4	2.44	7.3	0	29.3	2.4	9.8
IITapping	1	2.33	9.3	0	18.6	11.6	9.3
IITapping	4	2.33	7	0	27.9	2.3	9.3
RDControl	1	2	2	0	4	20	16
RDControl	4	6	0	0	6	38	6
RDLetters	1	4.76	0	4.8	0	4.8	33.3
RDLetters	4	2.38	0	0	2.4	28.6	19
RDTapping	1	0	0	0	2.1	14.9	29.8
RDTapping	4	4.26	0	2.1	4.3	29.8	12.8



Note: Modelling is presented as percentage of participants per condition best described by each model.

Conclusions

- The verbal and the procedural task each impacted rule-described learning.
- All II groups ended at a similar level of performance.
- Suggests that motor tasks may not be a good mechanism for interfering with the procedural system.

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