

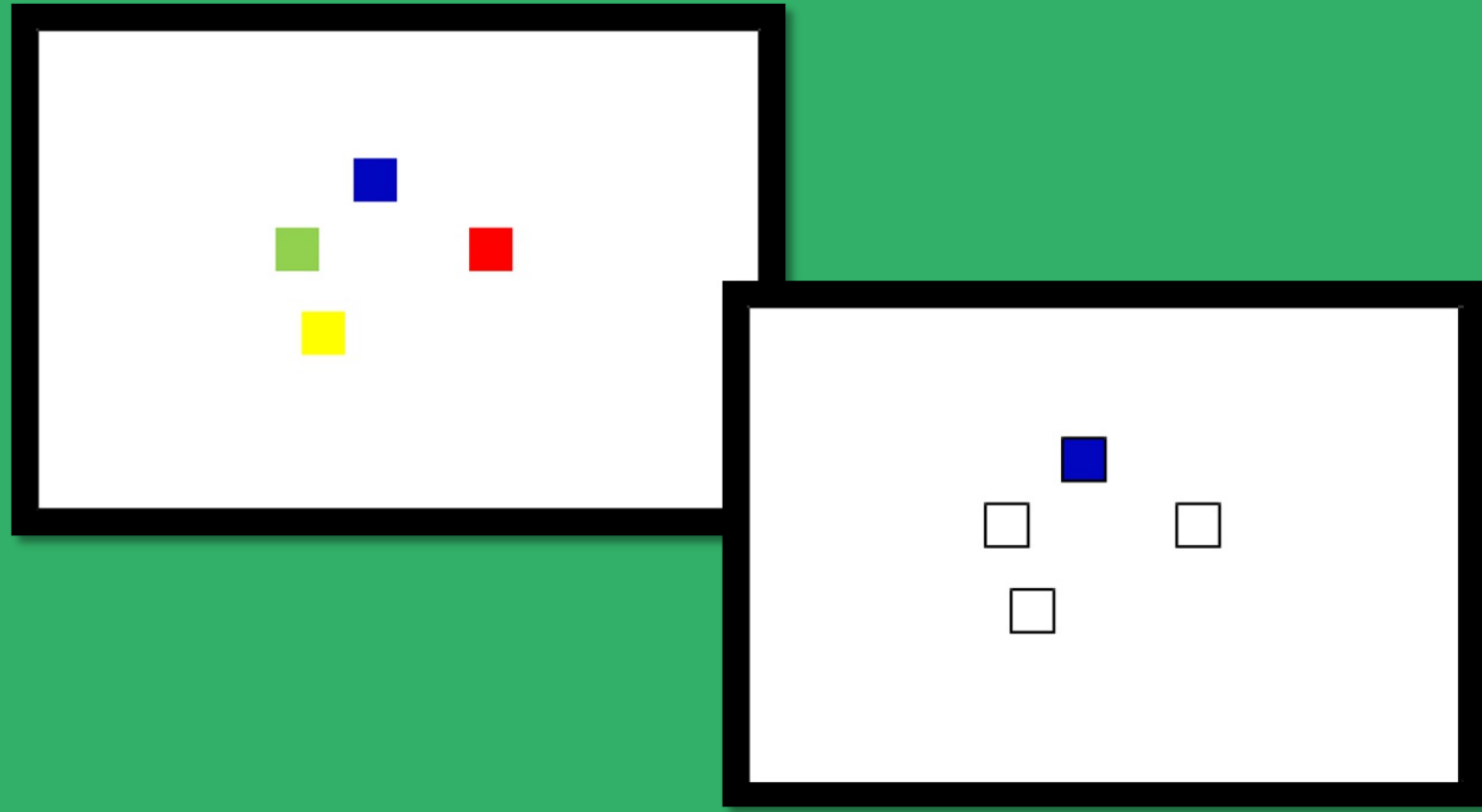
An Interference Model of Visual Working Memory: Applications to Change Detection

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Experiment

Single-probe change detection task:

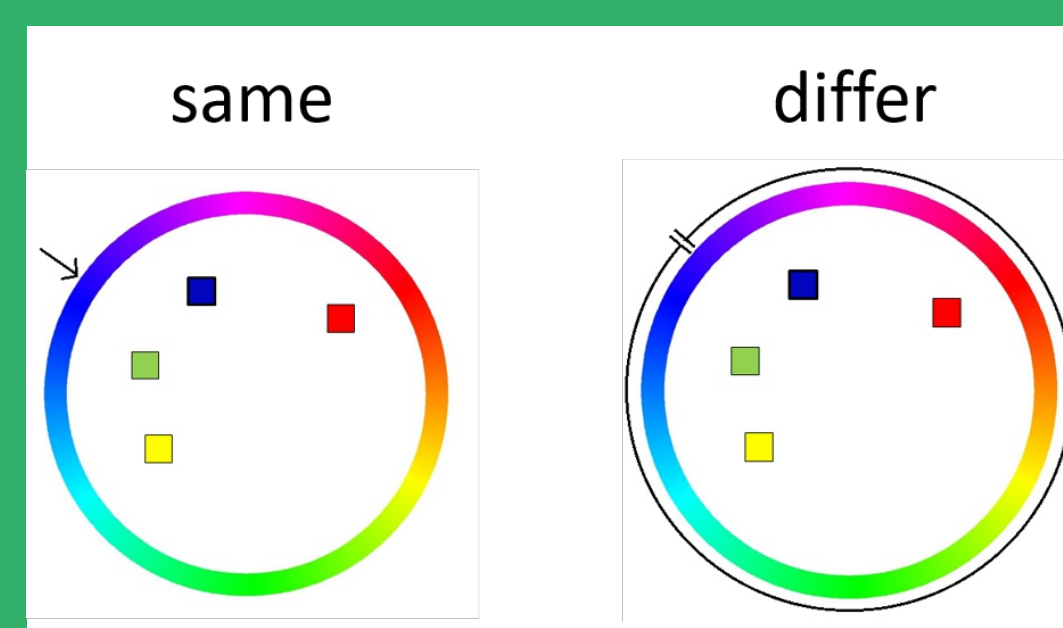


20 participants from UZH

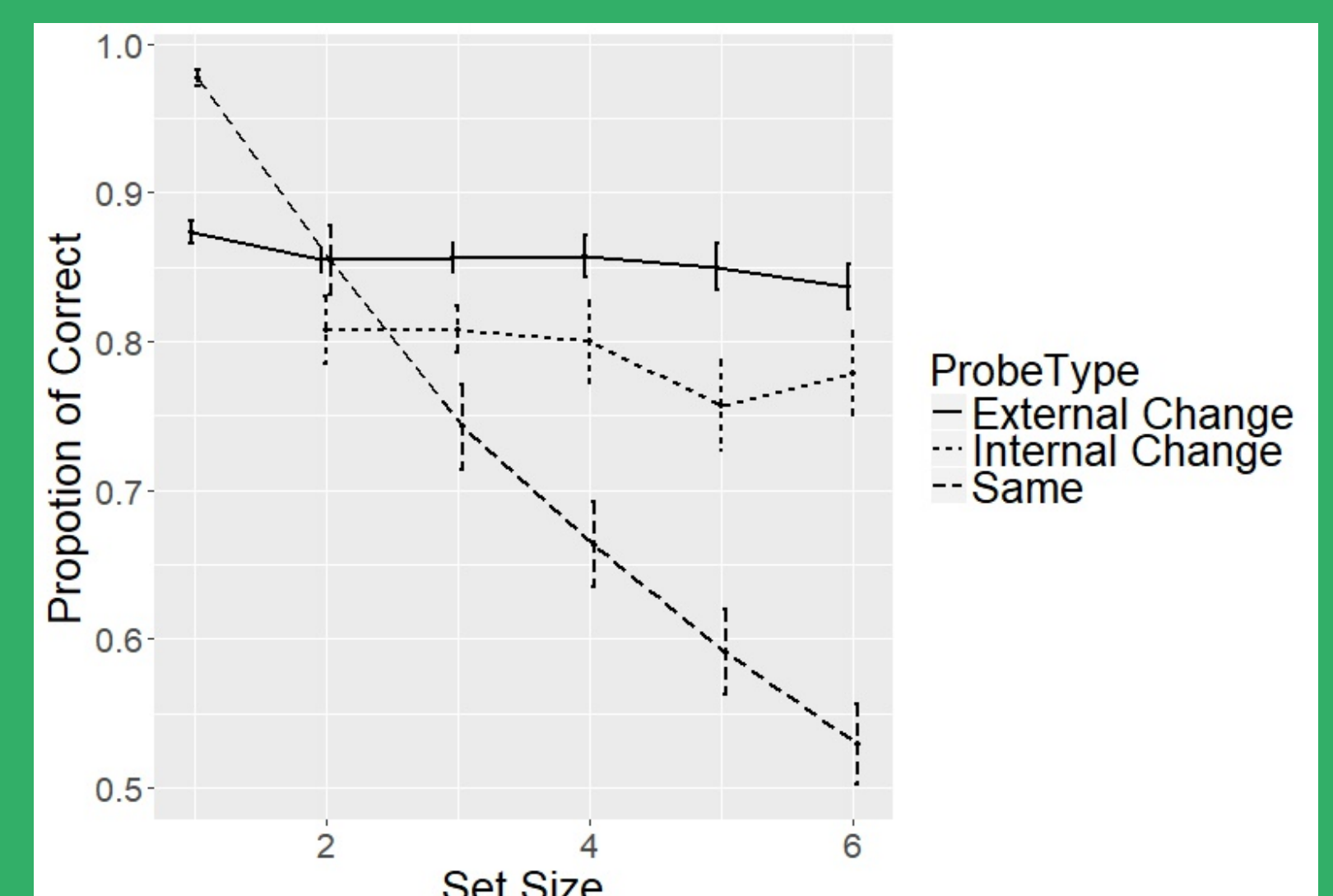
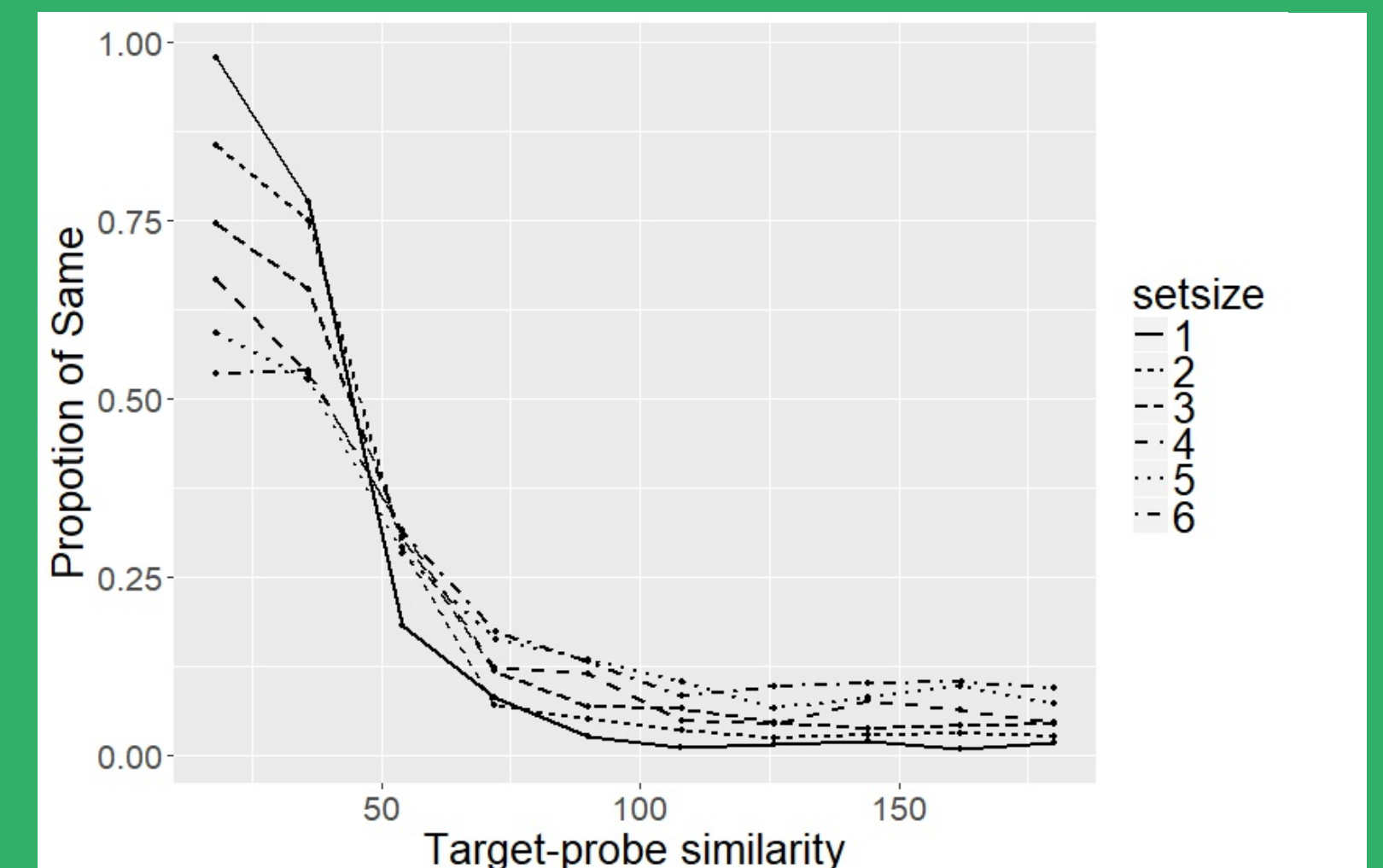
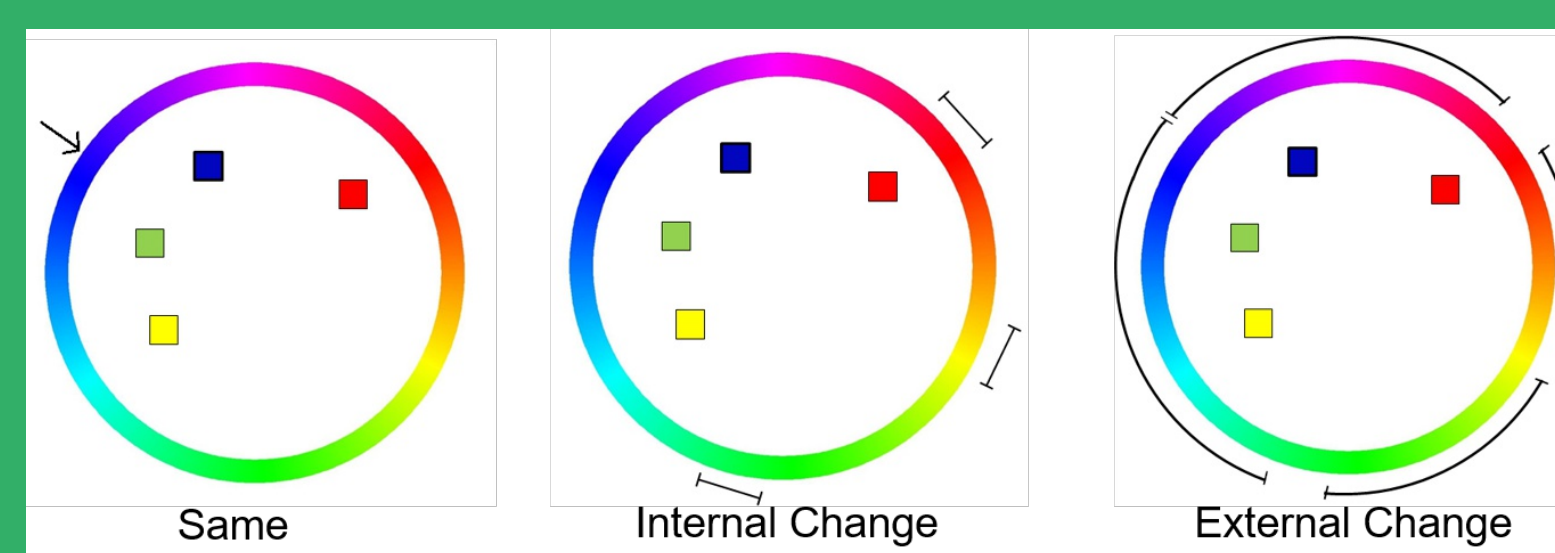
Material: Colors from continuous colorwheel.

Manipulations:
Set sizes (1-6)
probe type (same, differ)

2640 trials per participants.



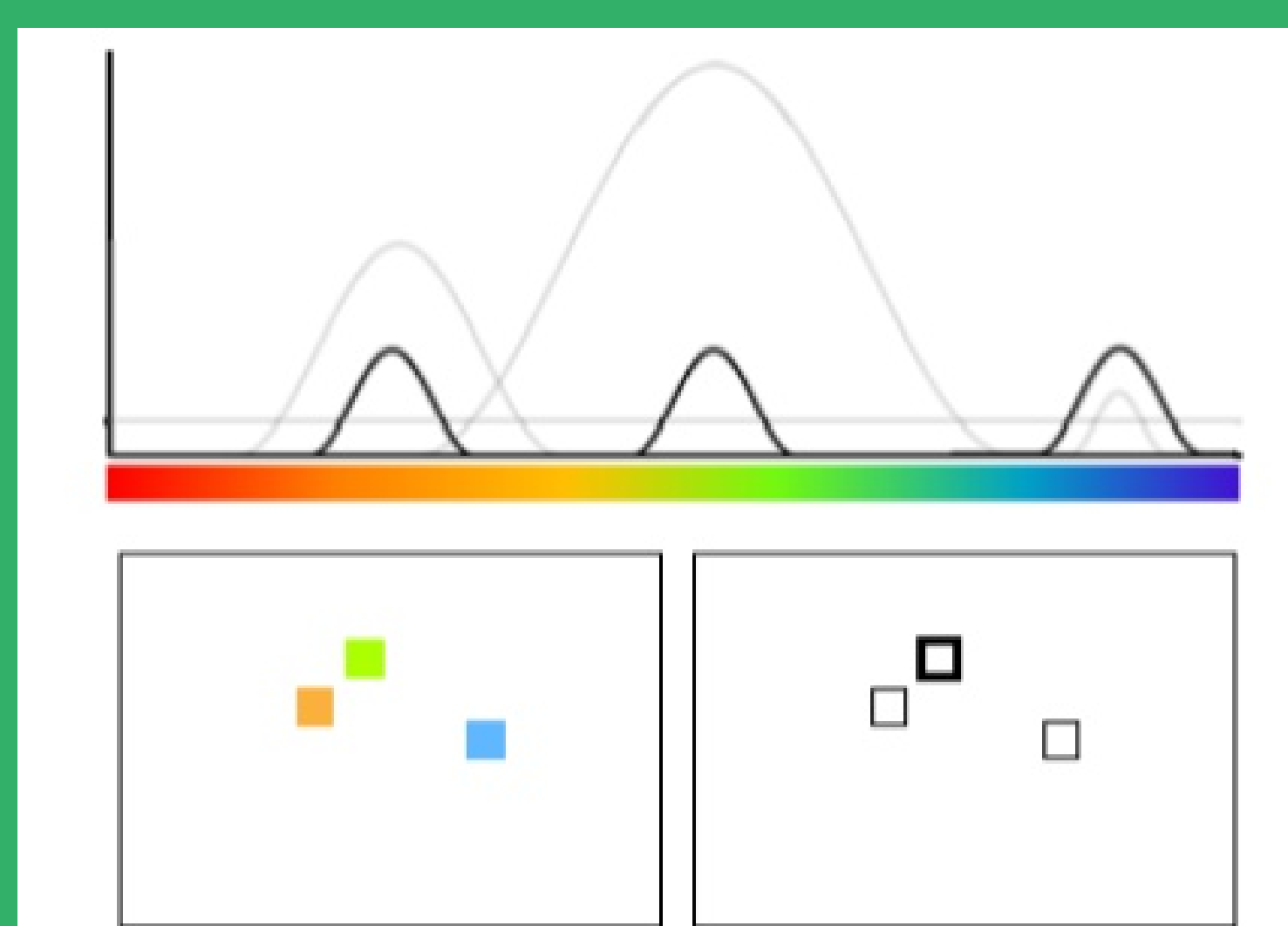
Relable



Interference Model

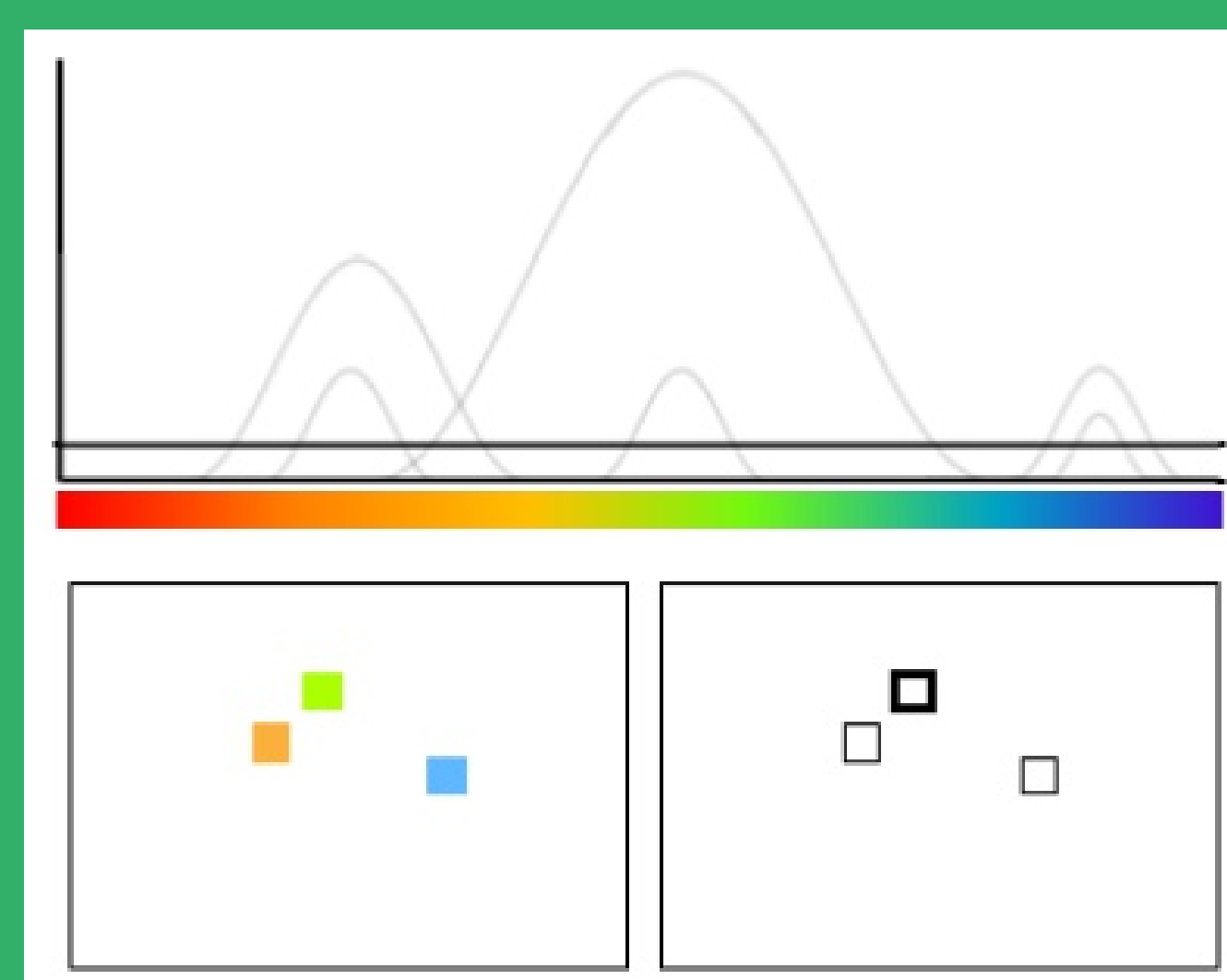
Recall process activate all the possible response candidates.
The response candidates compete with each others.

Activation =



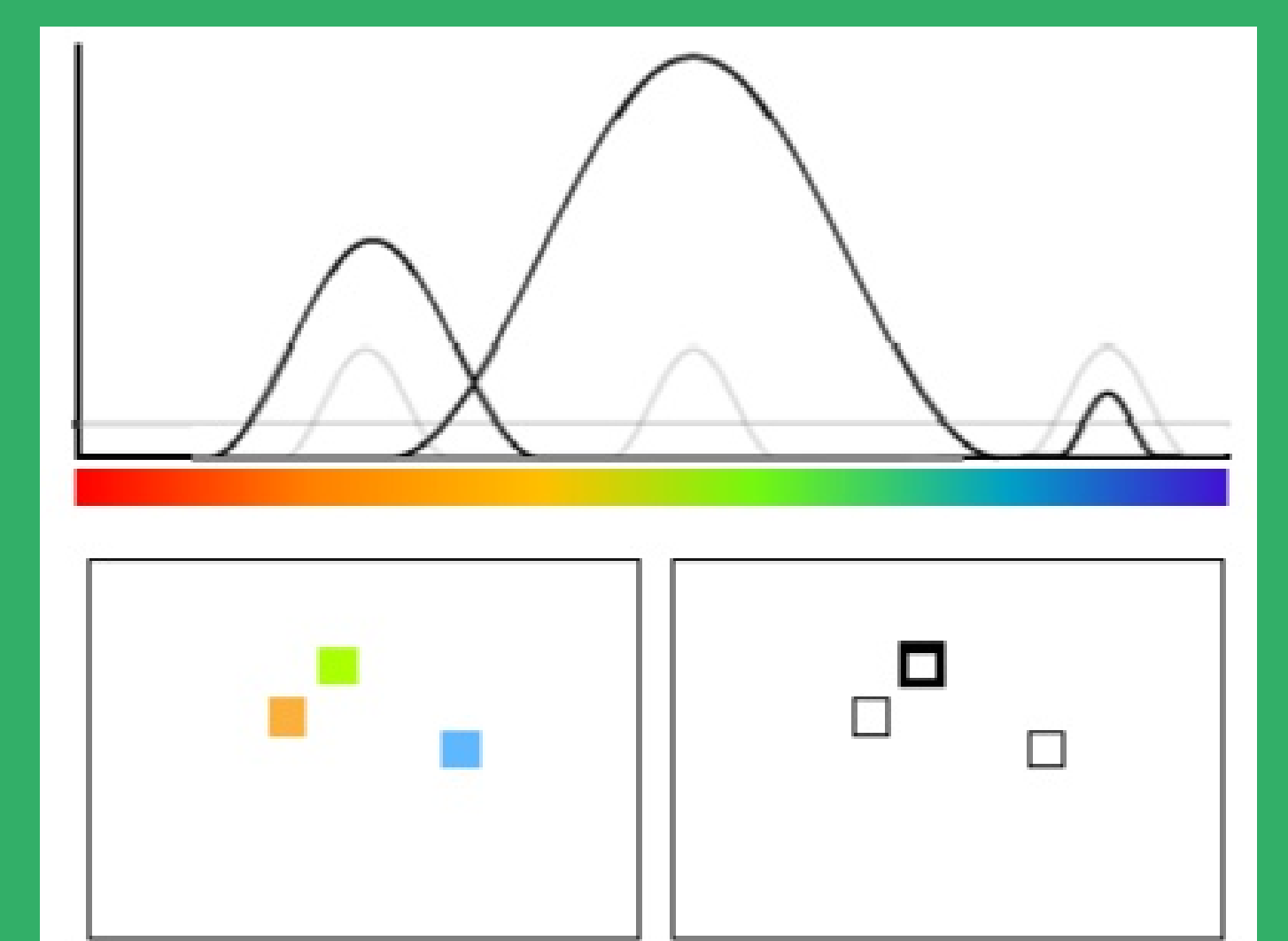
Context-independent
activation

+



Background-noise
activation

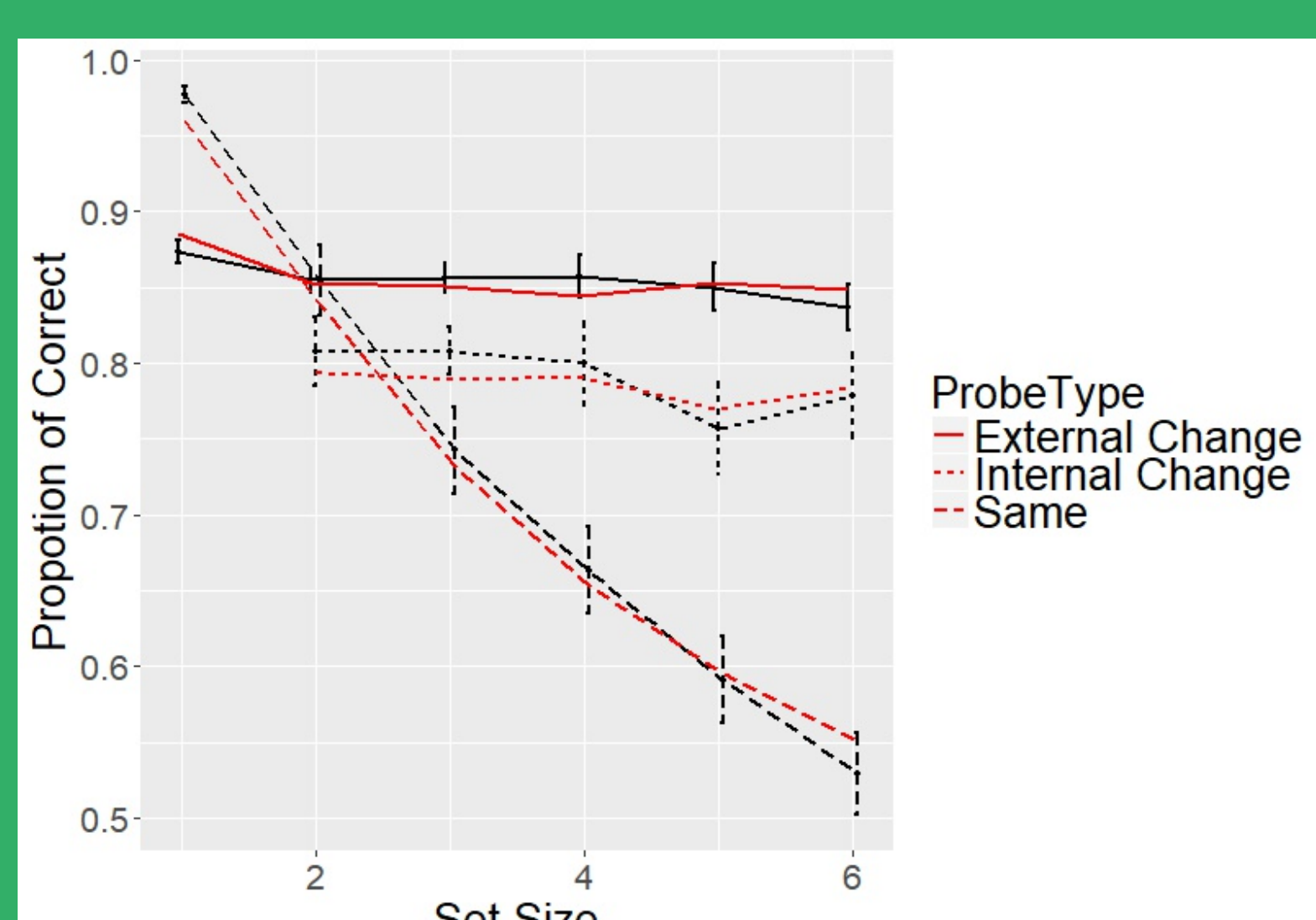
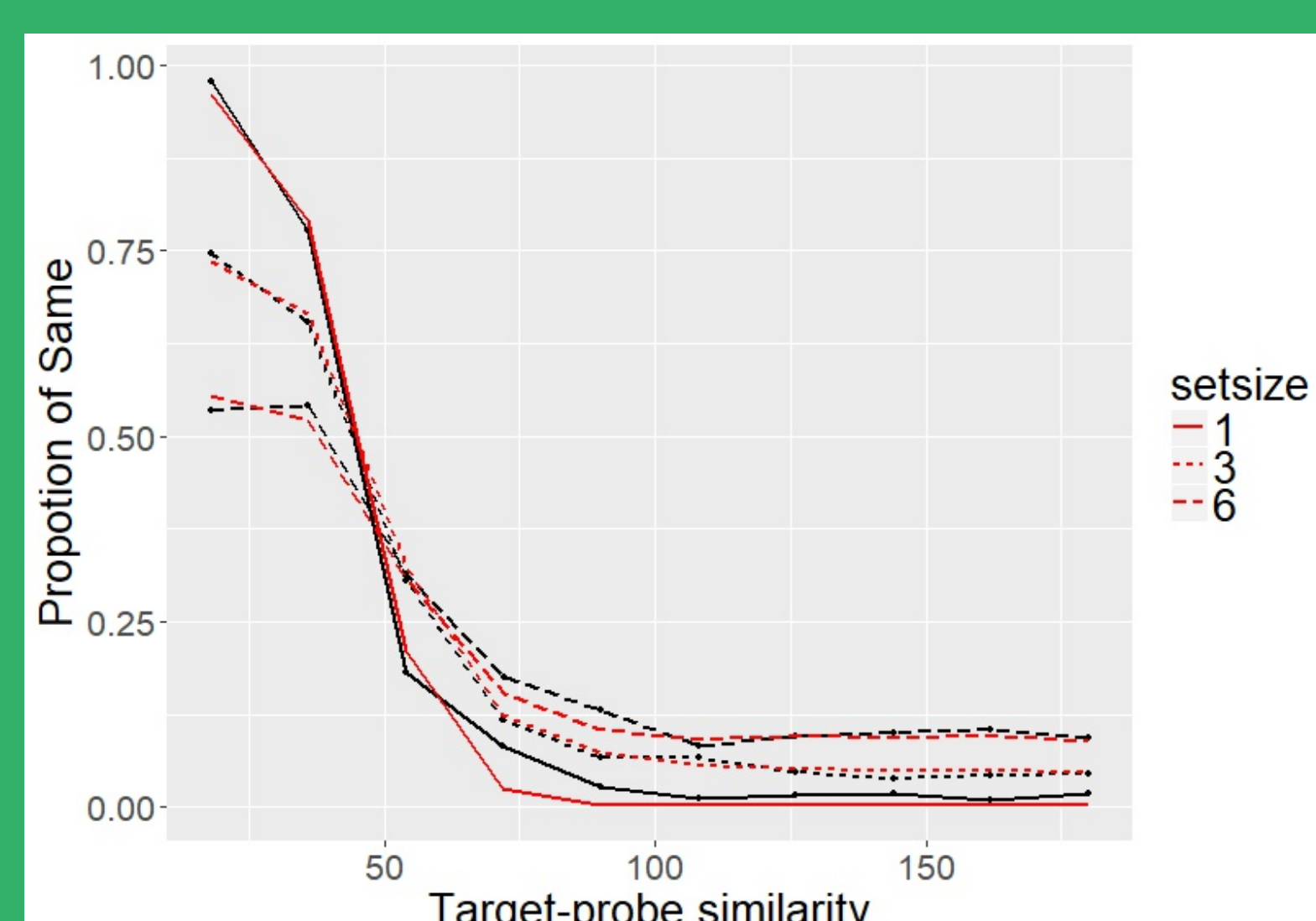
+



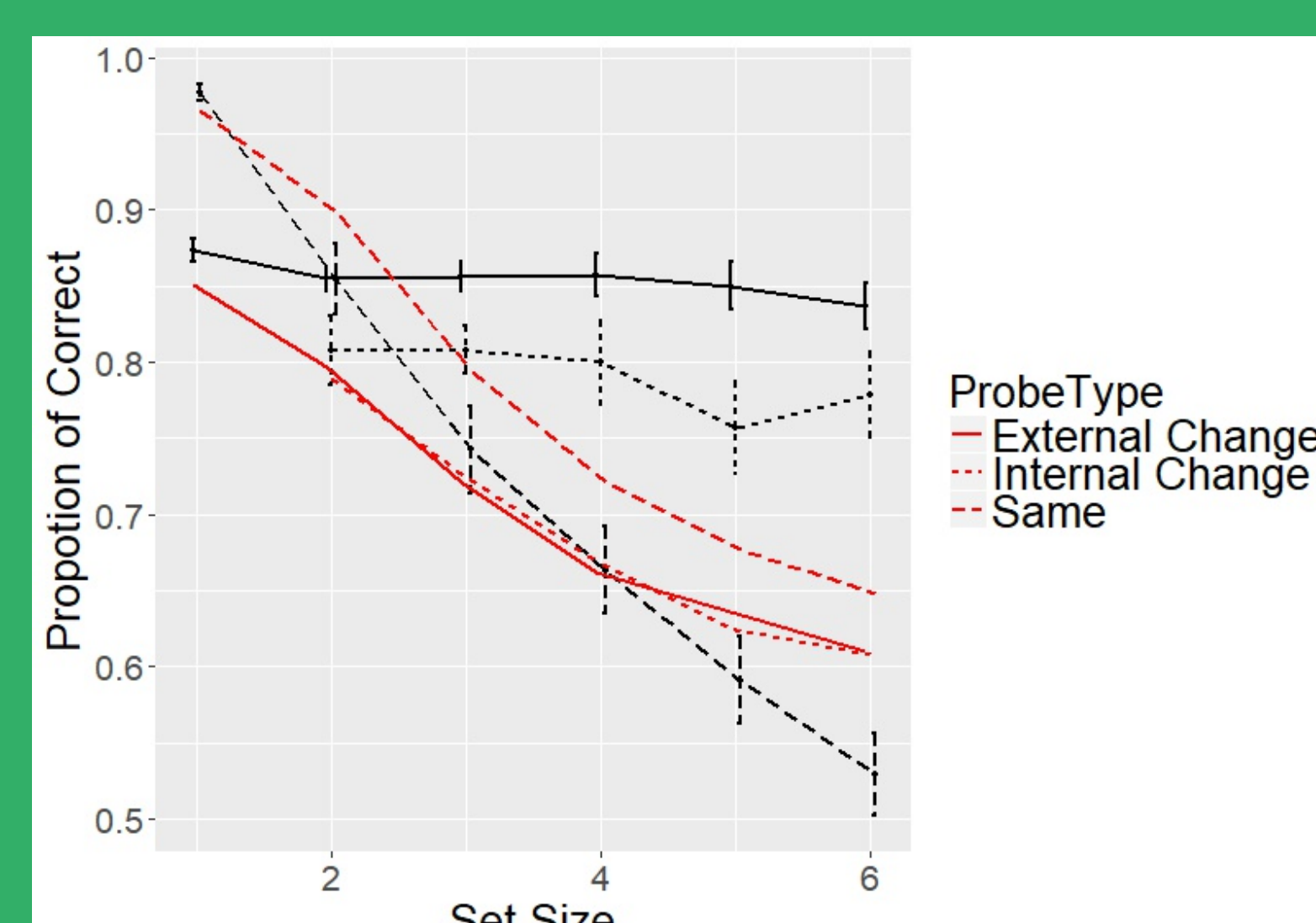
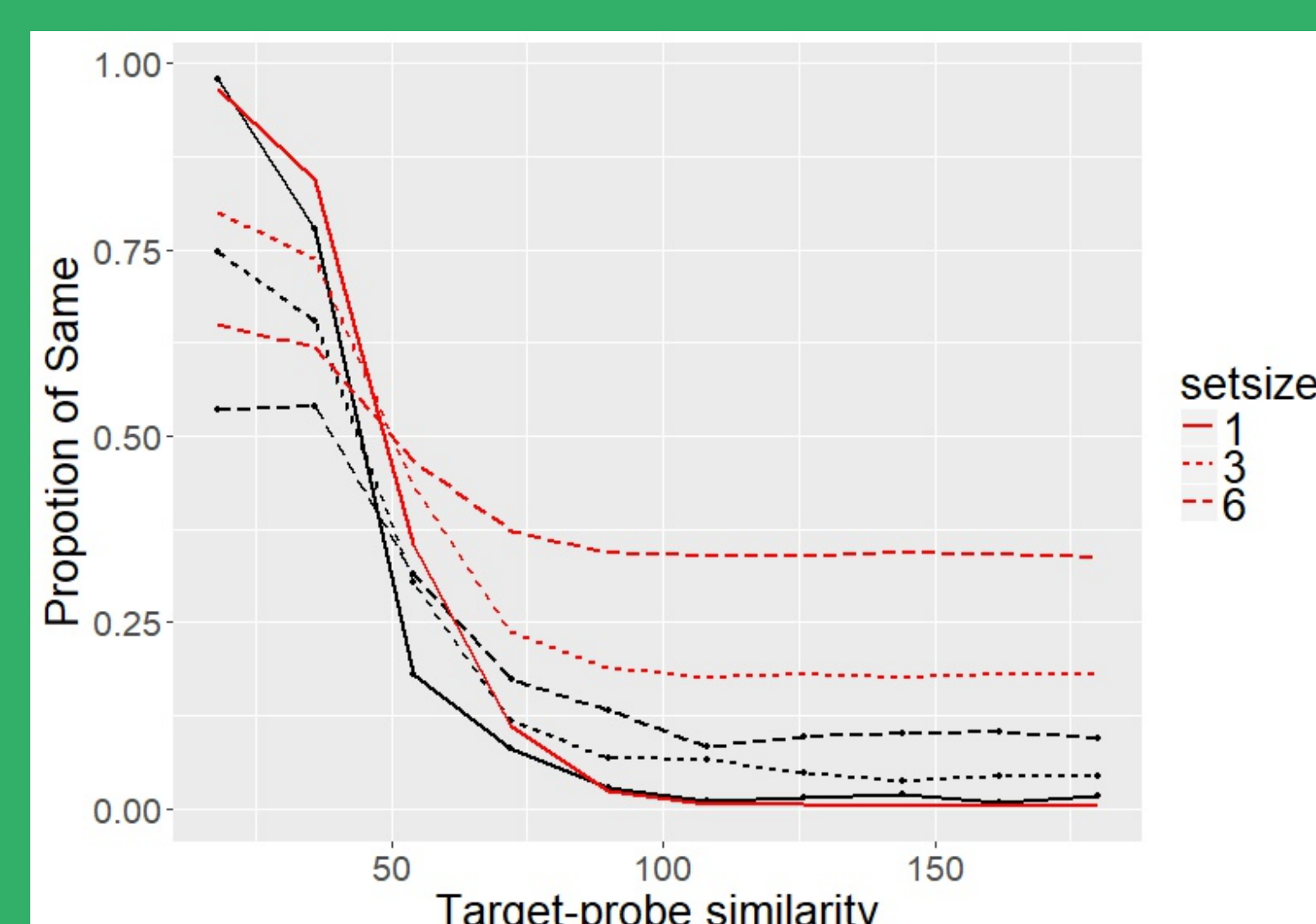
Cue-retrieval
activation

Model Fitting

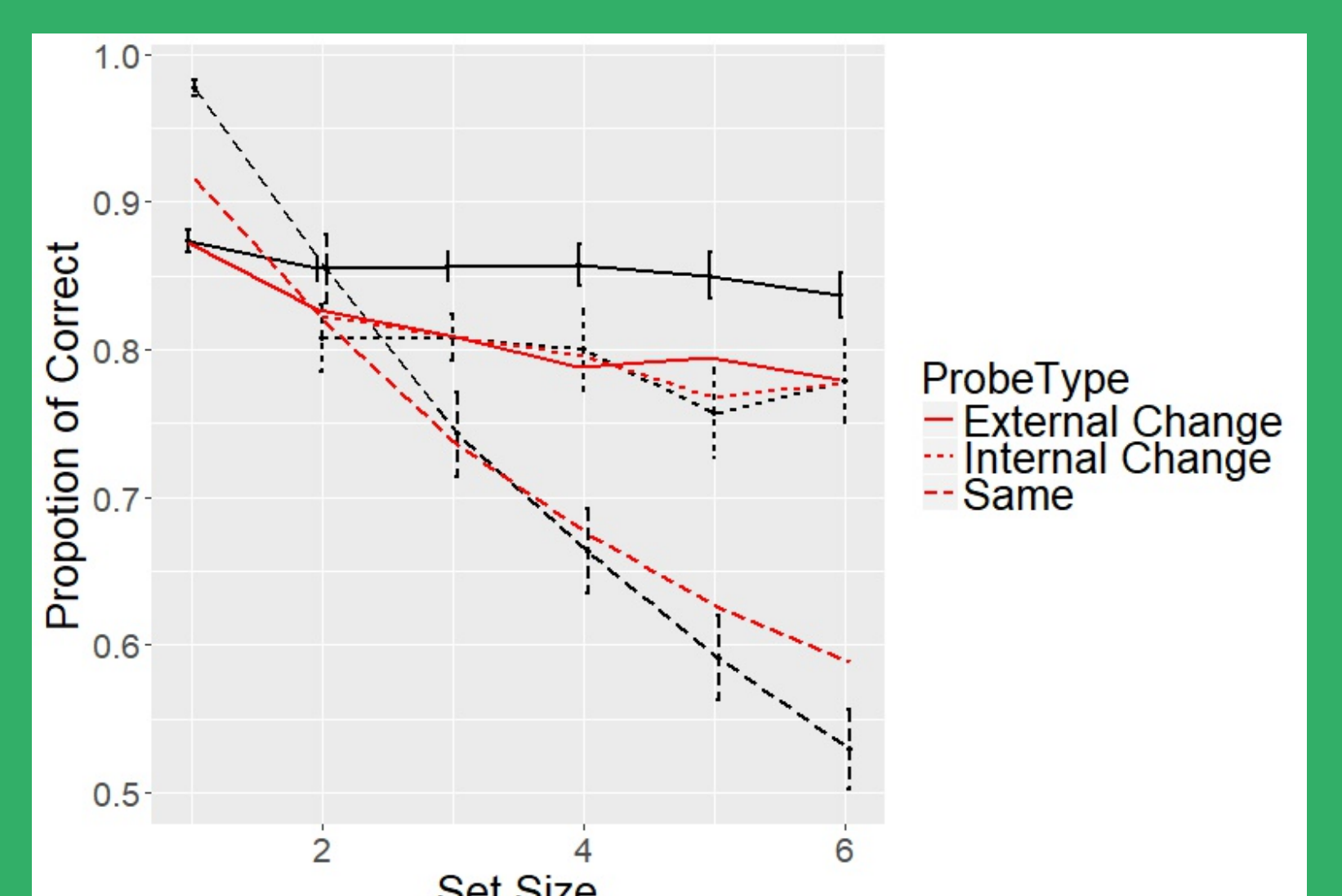
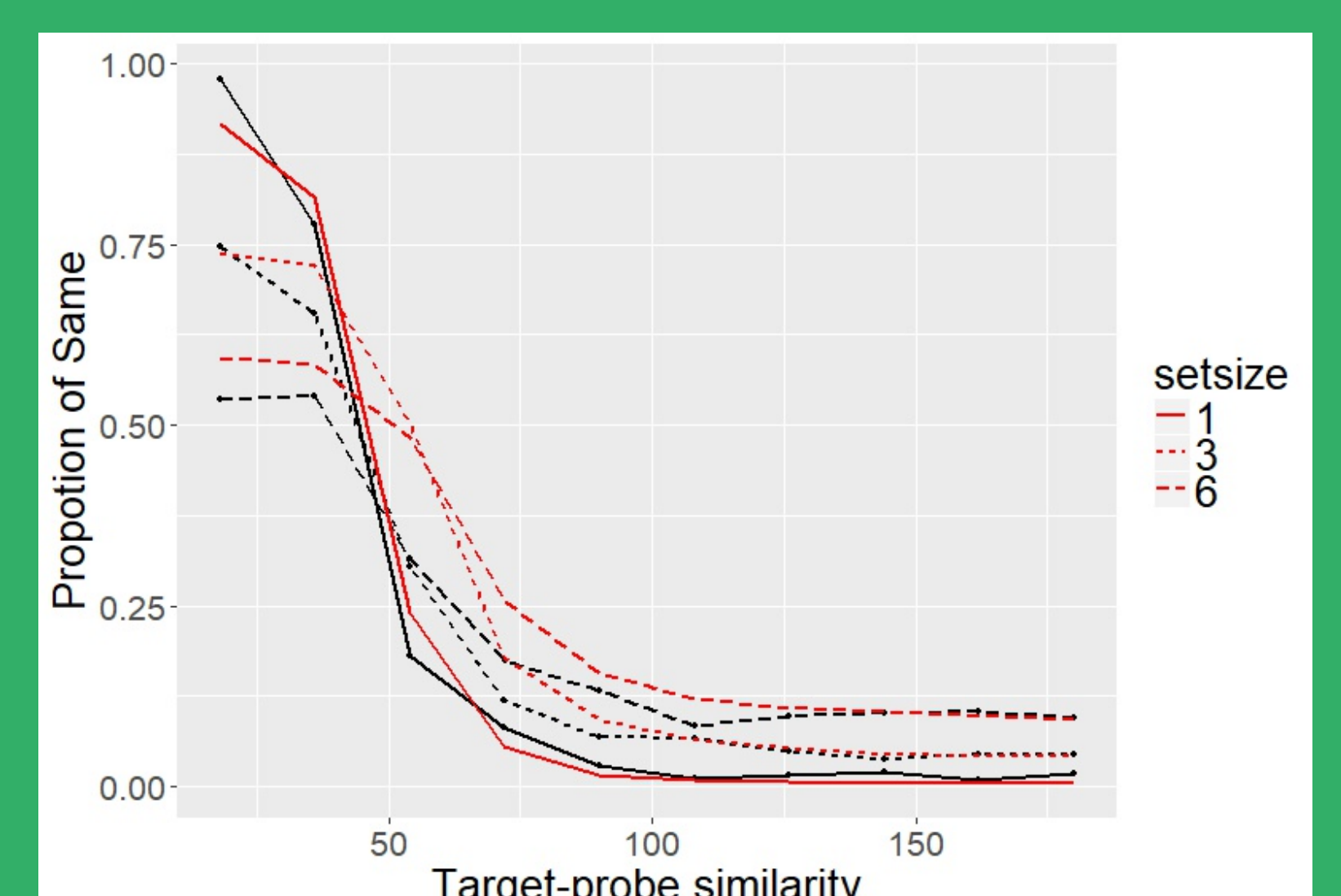
Interference Model



Slot-Averaging Model



Variable Precision Model



Interference Model fits the data really well.
SA and VP struggled with internal change probe.