

Task	Vismotor
Duration (1 Run)	155sec (2m35s ~ 2.58m)
Stimuli	Black and white circular checkerboard, with red flickering square targets
Stimuli Manipulations	Red squares appear in pairs, either LEFT or RIGHT of central fixation
Task requirements	Participants respond with either index finger (for LEFT) or middle finger (for RIGHT) immediately once they detect red squares.
Other task notes	Checkerboard flickers at a frame-rate of: 4 Hz; As a cueing facilitator, the green fixation turns white 1s before the start of each block and stays white during the active block. It turns green and stays green during the fixation blocks.
Set creation	Sets are created by using Nback_setsv2.m. Of the 10 true trials (there can be no matches on the first 2 trials), 4 will be matches, and 3 will be mismatches (a 1Back match). There must be at least 5 unique letters in each block.
Design	VS = Visual Checkerboard with targets 8s countdown + [18s(+)] : [27s(VS), 18s(+), 27s(VS), 18s(+), 27s(VS), 12s(+)]
Trials/Block/Run	3 total blocks of VS presented per run + initial fixation. Each block contains 9 targets.
Trial timing	Targets presented for 0.5s, with fixed ITI of 2.5s (was 1.5s in MH version)
Randomization	The location of targets (LEFT vs. RIGHT) are randomized between sets. Within a set there are 13 of one type and 14 of the other – with 50% of sets have 1 extra trial type of NEAR and 50% with 1 extra trial of FAR. The order of trial types is random across the blocks with no constraints other than meeting the correct number of each trial type.
Goal	To activate visual cortex and frontoparietal networks.

Stimuli

