

Guidance notes

This folder contains:

1. The laboratory log documenting data collection (participant codes and dates).
2. The full original data set saved as .cfs files collected and processed using Signal software (Cambridge Electronic Design, Cambridge, UK).
3. Signal configurations used to run data collections/acquire data.
 - a. L&R_OBS.sgcx
 - b. L&R_BAL.sgcx
 - c. Positive Control.sgcx
4. Signal scripts used to process data.
 - a. Main study analysis.sgs
 - b. Positive control analysis.sgs
 - c. BAL_detect response error.sgs

For Signal data configurations, the states were defined as follows:

L&R_BAL.sgcx

- Each test block = 30 trials (x 2 blocks/condition).
 - State 1 = 3s occlusion/NO pert /3 repeats [HANDLE]
 - State 2 = 3s occlusion/0.2s pert /1 repeat [HANDLE]
 - State 3 = 3s occlusion/1s pert /1 repeat [HANDLE]
 - State 4 = 4s occlusion/ NO pert /3 repeats [HANDLE]
 - State 5 = 4s occlusion/0.2 pert /1 repeat [HANDLE]
 - State 6 = 4s occlusion/1s pert /1 repeat [HANDLE]
 - State 7 = 3s occlusion/NO pert /3 repeats [NO-HANDLE]
 - State 8 = 3s occlusion/0.2s pert /1 repeat [NO-HANDLE]
 - State 9 = 3s occlusion/1s pert /1 repeat [NO-HANDLE]
 - State 10 = 4s occlusion/ NO pert /3 repeats [NO-HANDLE]
 - State 11 = 4s occlusion/0.2 pert /1 repeat [NO-HANDLE]
 - State 12 = 4s occlusion/1s pert /1 repeat [NO-HANDLE]
 - State 13 = No vision/Reference – 10 repeats [NO-HANDLE]

(For **L&R_OBS.sgcx** the states remain the same however no perturbations were delivered)

Positive Control.sgcx

- 1 Test block = 45 trials
 - State 1 = 3s occlusion/NO pert /15 repeats [HANDLE]
 - State 2 = 3s occlusion/0.2s pert /15 repeats [NO-HANDLE]
 - State 3 = No vision/Reference – 15 repeats [NO-HANDLE]

**Please see Methods section of manuscript for how all tasks were performed.*

Channel order and legend

1. TS: Test stimulus for TMS
2. FDI: First Dorsal Interosseus EMG
3. OP: Opponens Pollicus EMG
4. TA_R: Tibialis Anterior EMG (right leg)
5. TA_L: Tibialis Anterior EMG (left leg)
6. Vision: Occlusion goggles
7. MagOFF: Cable release (i.e. perturbation)
8. FSR_H: Force sensitive resistor on Handle
9. FSR_leg: Force sensitive resistor on Leg Block
10. Cable*
11. Rfootswitch*
12. Lfootswitch*

*Unused channels for this study.