**Supplementary tables**

Supplementary table 1: original BrDI outcome measures pre-and post-intervention, split by condition.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Condition** | **Test** | **% Corr** | **% DR** | **RT (ms)** | **MTb (ms)** | **MTf (ms)** | **AE (mm)** | **VE (mm)** | **PLf N (%)** |
| D | Pre | 99.2 (0.2) | 0.2 (0.2) | 665 (58) | 757 (54) | 813 (60) | 3.6 (0.2) | 2.6 (0.1) | 102 (1) |
|  | Post | 99.9 (0.3) | 0.2 (0.2) | 573 (45) | 661 (37) | 750 (59) | 4.2 (0.2) | 2.9 (0.1) | 102 (1) |
| DR | Pre | 88.5 (2.2) | 8.6 (1.7) | 1085 (62) | 1098 (78) | 1321 (130) | 4.1 (0.2) | 3.1 (0.2) | 104 (1) |
|  | Post | 89.4 (2.4) | 9.9 (2.4) | 934 (64) | 953 (65) | 1298 (128) | 4.2 (0.2) | 3.3 (0.2) | 107 (2) |
| PC | Pre | 98.7 (0.8) | 0.4 (0.3) | 578 (36) | 994 (49) | 1245 (75) | 4.1 (0.2) | 2.7 (0.1) | 106 (1) |
|  | Post | 98.5 (0.6) | 0.2 (0.2) | 563 (37) | 870 (44) | 1092 (66) | 4.5 (0.2) | 3.0 (0.1) | 107 (1) |
| PCR | Pre | 72.4 (3.1) | 17.9 (3.1) | 1321 (101) | 1182 (69) | 2370 (175) | 4.7 (0.2) | 3.2 (0.2) | 129 (5) |
|  | Post | 77.3 (3.4) | 17.9 (2.9) | 1138 (91) | 1003 (52) | 1978 (202) | 4.7 (0.2) | 3.5 (0.2) | 131 (7) |

Data is expressed as group mean +/- standard error, D: Direct, DR: Direct Reversal, PC: Plane Change, PCR: Plane Change Reversal, % Corr: percentage of trials correct, % DR: percentage of trials with a direction reversal error, RT: response time, MTb: ballistic movement time, MTf: full movement time, AE: absolute error, VE: variable error, PLf N: normalized full path length.

Supplementary table 2: original BrDI outcome measures pre-and post-intervention, split by group.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Group** | **Test** | **% Corr** | **% DR** | **RT (ms)** | **MTb (ms)** | **MTf (ms)** | **AE (mm)** | **VE (mm)** | **PLf N (%)** |
| 1 | Pre | 91.1 (1.8) | 7.1 (1.6) | 852 (59) | 974 (52) | 1265 (105) | 4.0 (0.1) | 2.9 (0.1) | 108 (2) |
|  | Post | 92.6 (1.9) | 6.1 (1.0) | 721 (46) | 867 (43) | 1023 (75) | 4.2 (0.1) | 3.3 (0.1) | 108 (3) |
| 2 | Pre | 90.3 (91.5) | 3.3 (2.1) | 863 (91) | 1033 (93) | 1597 (220) | 4.2 (0.2) | 2.8 (0.2) | 111 (4) |
|  | Post | 91.5 (2.7) | 7.1 (2.5) | 888 (113) | 698 (66) | 1497 (204) | 4.4 (0.1) | 2.9 (0.2) | 109 (3) |
| 3 | Pre | 88.4 (3.4) | 7.8 (2.5) | 903 (118) | 882 (55) | 1380 (172) | 3.9 (0.2) | 2.9 (0.2) | 112 (5) |
|  | Post | 92.0 (2.5) | 6.9 (2.3) | 752 (81) | 783 (48) | 1257 (186) | 4.7 (0.2) | 3.2 (0.1) | 113 (5) |
| 4 | Pre | 92.4 (3.3) | 5.2 (2.9) | 1003 (118) | 1123 (82) | 1519 (169) | 4.4 (0.3) | 2.7 (0.2) | 108 (3) |
|  | Post | 90.2 (4.2) | 5.5 (3.4) | 845 (92) | 950 (59) | 1524 (182) | 4.7 (0.3) | 2.9 (0.2) | 117 (7) |

Data is expressed as group mean +/- standard error, 1: normal cognition group, 2: sub-average cognition group, 3: mild-to-moderate cognitive deficits group, 4: severe cognitive deficits group, % Corr: percentage of trials correct, % DR: percentage of trials with a direction reversal error, RT: response time, MTb: ballistic movement time, MTf: full movement time, AE: absolute error, VE: variable error, PLf N: normalized full path length.