**Supplementary Table 1. Outside- and inside- fMRI Non-switch, Switch, and Switch cost performance (error and RT) of the TCC and CON groups at pre- and post-intervention tests.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | TCC (N= 16) |  | CON (N= 15) | Group × Time | Group | Time |
| Pre-intervention | Post-intervention |  | Pre-intervention | Post-intervention |
| **Non-switch** |  |  |  |  |  |  |  |  |
| Outside-fMRI error (%) |  6.9 ± 6.6 |  2.8 ± 2.7 |  | 9.3 ± 6.2 |  9.7 ± 7.7 | 0.056 |  0.021 | 0.168 |
| Inside-fMRI error (%) |  2.8 ± 2.4 |  1.8 ± 2.1 |  | 2.3 ± 1.5 |  3.1 ± 3.9 | 0.096 |  0.728 | 0.363 |
| Inside-fMRI RT (ms) |  878.5 ± 96.4 | 877.5 ± 125.1 |  | 897.4 ± 95.7 |  949.8 ± 98.6 | 0.176 |  0.282 | 0.962 |
| **Switch** |  |  |  |  |  |  |  |  |
| Outside-fMRI error (%) |  17.3 ± 11.7 |  7.0 ± 8.1† |  | 20.3 ± 11.9 |  20.0 ± 11.4 | < 0.001\*  |  0.046 | 0.642 |
| Inside-fMRI error (%) |  4.9 ± 3.9 |  3.1 ± 3.8 |  | 6.6 ± 6.0 |  5.2 ± 3.0 | 0.849 |  0.237 | 0.711 |
| Inside-fMRI RT (ms) |  1079.4 ± 119.3 | 1061.5 ± 93.9 |  | 1147.9 ± 122.8 |  1181.4 ± 112.2 | 0.224 |  0.042 | 0.687 |
| **Switch cost** |  |  |  |  |  |  |  |  |
| Outside-fMRI error (%) |  10.5 ± 9.8 |  4.2 ± 8.3 |  | 11.0 ± 8.3 |  10.3 ± 9.2 | 0.079 |  0.263 | 0.467 |
| Inside-fMRI error (%) |  2.1 ± 4.0 |  1.4 ± 3.4 |  | 4.2 ± 5.4 |  2.0 ± 4.5 | 0.515 |  0.255 | 0.889 |
| Inside-fMRI RT (ms) |  201.0 ± 76.5 |  184.0 ± 84.3 |  | 250.5 ± 62.4 |  231.6 ± 82.0 | 0.904 |  0.086 | 0.722 |

Values are means ± standard deviations. Outside-fMRI error means performance during practice trials. error= error rate; RT= reaction time.

\* adjusted *p*< 0.017: showing a significant difference, using RM ANCOVA and controlling for education. †*p*< 0.001: post hoc analysis of repeated measures ANCOVA, showing a significant difference from pre-intervention test data.