## **Supplementary Table S1.**

Statistical comparison of Global efficiency in the SOLO and PAIRED conditions. Statistical results of follow-up contrasts directly comparing the values of the intra-brain global efficiency in the SOLO and PAIRED conditions for J1 (lower skill level) and J2 (higher skill level). From left to right: first sample (sample 1), number of subjects in first sample (n\_sample1), second sample (sample 2), numbers of subjects in second sample (n\_sample2), t-test value (t), degrees of freedom (df), p value (p), Cohen's d value for paired samples Cohen d.

| Global<br>efficiency | sample 1  | n_sample1 | sample 2  | n_sample2 | t     | df | p     | Cohen d |
|----------------------|-----------|-----------|-----------|-----------|-------|----|-------|---------|
|                      | SOLO J1   | 7         | SOLO J2   | 7         | 0.977 | 6  | 0.366 | 0.369   |
|                      | PAIRED J1 | 7         | PAIRED J2 | 7         | 1.485 | 6  | 0.188 | 0.561   |
|                      | SOLO J1   | 7         | PAIRED J1 | 7         | 2.233 | 6  | 0.067 | 0.844   |
|                      | SOLO J2   | 7         | PAIRED J2 | 7         | 0.784 | 6  | 0.463 | 0.296   |

Statistical results of follow-up contrasts directly comparing the values of the intra-brain LAT in the SOLO and PAIRED conditions for MATCHED and UNMATCHED experience. From left to right: first sample (sample 1), number of subjects in first sample (n\_sample1), second sample (sample 2), numbers of subjects in second sample (n\_sample2), t-test value (t), degrees of freedom (df), p value (p), Cohen's d value for independent samples in the first and second cell Cohen d, Cohen's d value for paired samples in the third and fourth cell Cohen d.

| intra- | sample 1            | n_sample1 | sample 2              | n_sample2 | t     | df | p     | Cohen d |
|--------|---------------------|-----------|-----------------------|-----------|-------|----|-------|---------|
|        | SOLO<br>MATCHED     | 3         | SOLO UN-<br>MATCHED   | 4         | 0.684 | 5  | 0.524 | 0.522   |
|        | PAIRED<br>MATCHED   | 3         | PAIRED UN-<br>MATCHED | 4         | 2.058 | 5  | 0.095 | 1.571   |
|        | SOLO<br>MATCHED     | 3         | PAIRED<br>MATCHED     | 3         | 2.288 | 2  | 0.149 | 1.320   |
|        | SOLO UN-<br>MATCHED | 4         | PAIRED UN-<br>MATCHED | 4         | 2.128 | 3  | 0.123 | 1.064   |