Supplementary File 3a. Regions showing greater activation during updating under the RetPrac condition than under the Restudy condition.

|  |  |  |
| --- | --- | --- |
|  | Coordinates |  |
| Region | x | y | z | T |
| Left Middle Frontal Gyrus | -38 | 20 | 24 | 7.40 |
| Left Caudate | -8 | 12 | 4 | 12.54 |
| Right Caudate | -2 | 10 | 4 | 13.30 |
| Left Insula Cortex | -32 | 22 | -4 | 12.61 |
| Right Insula Cortex | 34 | 26 | 2 | 13.24 |
| Left Orbital Cortex | -46 | 20 | -8 | 7.45 |
| Right Orbital Cortex | 34 | 26 | 2 | 13.24 |
| Left Frontal Pole | -50 | 42 | 8 | 6.73 |
| Superior Frontal Gyrus | -2 | 16 | 52 | 13.30 |
| Paracingulate Gyrus | 0 | 28 | 44 | 13.71 |
| Left Lateral Occipital Cortex | -32 | -62 | 44 | 8.28 |
| Left Intracalcarine Cortex | -10 | -76 | 10 | 7.07 |
| Right Intracalcarine Cortex | 10 | -72 | 14 | 6.41 |
| Left Precuneous Cortex | -12 | -66 | 32 | 11.94 |

Supplementary File 3b. Regions showing greater activation during updating under the Restudy condition than under the RetPrac condition.

|  |  |  |
| --- | --- | --- |
|  | Coordinates |  |
| Region | x | y | z | T |
| Left Hippocampus | -24 | -18 | -16 | 10.24 |
| Right Hippocampus | 26 | -18 | -16 | 13.35 |
| Left Occipital Fusiform Gyrus | -28 | -70 | -16 | 10.74 |
| Right Occipital Fusiform Gyrus | 34 | -68 | -18 | 12.52 |
| Left Temporal Occipital Fusiform Cortex | -26 | -54 | -16 | 9.20 |
| Right Temporal Occipital Fusiform Cortex | 30 | -54 | -18 | 12.01 |
| Medial Prefrontal Cortex | 2 | 30 | 8 | 10.77 |
|  | 0 | 6 | -8 | 12.43 |
|  | 2 | 38 | -18 | 7.36 |
|  | 2 | 60 | 16 | 9.01 |
| Left Supramarginal Gyrus | -66 | -34 | 22 | 9.85 |
| Right Supramarginal Gyrus | 58 | -30 | 34 | 10.64 |
| Left Angular Gyrus | -62 | -54 | 30 | 9.30 |
| Right Angular Gyrus | 60 | -56 | 18 | 9.39 |
| Left Middle Temporal Gyrus | -66 | -14 | -8 | 9.98 |
| Right Middle Temporal Gyrus | 54 | -4 | -32 | 9.34 |
| Left Temporal Pole | -50 | 16 | -32 | 7.41 |
| Right Temporal Pole | 54 | 4 | -38 | 10.54 |
| Left Lateral Occipital Cortex, inferior division | -52 | -70 | -4 | 9.60 |
| Right Lateral Occipital Cortex, inferior division | 52 | -68 | -4 | 8.76 |
| Left Lateral Occipital Cortex, superior division | -42 | -78 | 16 | 6.74 |
| Right Lateral Occipital Cortex, superior division | 34 | -88 | 12 | 9.83 |
| Left Insular Cortex | -40 | -14 | -6 | 12.03 |
| Right Insular Cortex | 42 | -8 | -10 | 11.82 |
| Cingulate Gyrus, posterior division | 2 | -22 | 46 | 10.69 |

Supplementary File 3c. Pairwise comparisons of brain activity between trials with different updating performance.

|  |  |  |  |
| --- | --- | --- | --- |
|  | LC vs. FC | LC vs. IC | FC vs. IC |
| Region | T | P | T | P | T | P |
| Left DLPFC | -7.17 | < .001 | -4.76 | < .001 | 0.66 | .52 |
| dACC | -6.44 | < .001 | -4.89 | < .001 | 0.21 | .84 |
| Left anterior insular | -5.88 | < .001 | -5.19 | < .001 | 0.53 | .60 |
| Right anterior insular | -5.53 | < .001 | -3,71 | < .001 | 0.53 | .60 |
| Left caudate | -4.73 | < .001 | 1.28 | .22 | 4.82 | < .001 |
| Right caudate | -3.34 | .004 | 1.81 | .09 | 5.03 | < .001 |

Note: FC, first correct trials; LC: later correct trials; IC: incorrect trials