**Table S8**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ROIs from the **Fronto-parietal Network**  DV: **SPWM RT (spatial working memory speed)** | | | | | | | | | |
|  |  | Global Efficiency | | | | Local Efficiency | | | |
|  |  | 250 | | 300 | | 250 | | 300 | |
|  |  | β | R2 | β | R2 | β | R2 | β | R2 |
| Step 1 |  |  | .62 |  | .62 |  | .62 |  | .62 |
|  | Age | -.25\* |  | -.25\* |  | -.25\* |  | -.25\* |  |
|  | Sex | .13 |  | .13 |  | .13 |  | .13 |  |
|  | Single RT | .61\*\* |  | .61\*\* |  | .61\*\* |  | .61\*\* |  |
|  |  |  |  |  |  |  |  |  |  |
| Step 2 | SupPar |  | .63 |  | .64 |  | .63 |  | .62 |
|  | Age | -.28\* |  | -.30\* |  | -.23† |  | -.26\* |  |
|  | Sex | .15† |  | .16† |  | .14 |  | .13 |  |
|  | Single RT | .64\*\*\* |  | .64\*\*\* |  | .58\*\*\* |  | .61\*\*\* |  |
|  | ROI | .11 |  | .15 |  | .04 |  | .08 |  |
|  | Age x ROI | .01 |  | -.01 |  | -.15 |  | -.06 |  |
| Step 2 | LatOcc |  | .63 |  | .63 |  | .64 |  | .65 |
|  | Age | -.27\* |  | -.28\* |  | -.21† |  | -.17 |  |
|  | Sex | .13 |  | .14 |  | .14 |  | .17 |  |
|  | Single RT | .64\*\*\* |  | .65\*\*\* |  | .58\*\*\* |  | .60\*\*\* |  |
|  | ROI | .06 |  | .07 |  | -.13 |  | -.11 |  |
|  | Age x ROI | .04 |  | .07 |  | -.01 |  | -.09 |  |
| Step 2 | LingFus |  | .63 |  | .64 |  | .63 |  | .67\* |
|  | Age | -.28\* |  | -.29\* |  | -.20 |  | -.06 |  |
|  | Sex | .14 |  | .14 |  | .15 |  | .17 |  |
|  | Single RT | .66\*\*\* |  | .69\*\*\* |  | .60\*\*\* |  | .65\*\*\* |  |
|  | ROI | .11 |  | .15 |  | -.06 |  | -.22\* |  |
|  | Age x ROI | .04 |  | .06 |  | .07 |  | -.08 |  |

β p-value: †p<.10, \*p<.05, \*\*p<.01, \*\*\*p<.001; R2 p-value symbol represents statistical significance of R Square change.