Table S1. *Regression models for left hemisphere language-related ROIs (Model 2)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Region | Model 2 | | | | R2Δ |
| Predictor | B | SE | R2adjusted |
| IFG  Pars OpercularisCT | Dataset | 0.01 | 0.02 | 0.07 | .031\*\* |
| Age | -0.02\*\* | 0.01 |
| Sex | -0.01 | 0.01 |
| Diagnosis (SCD) | 0.04\* | 0.02 |
| Diagnosis (MCI) | 0.00 | 0.02 |
| Diagnosis (AD) | -0.04 | 0.02 |
| Supramarginal GyrusCT | Dataset | -0.01 | 0.01 | 0.14 | 0.04\*\*\* |
| Age | -0.02\*\* | 0.01 |
| Sex | -0.03\* | 0.01 |
| Diagnosis (SCD) | 0.02 | 0.02 |
| Diagnosis (MCI) | -0.01 | 0.02 |
| Diagnosis (AD) | -0.07\*\* | 0.02 |
| Inferior Parietal GyrusCT | Dataset | -0.02 | 0.01 | 0.17 | 0.09\*\*\* |
| Age | 0.00 | 0.01 |
| Sex | -0.03\*\* | 0.01 |
| Diagnosis (SCD) | 0.02 | 0.02 |
| Diagnosis (MCI) | 0.00 | 0.02 |
| Diagnosis (AD) | -0.11\*\* | 0.02 |
| CerebellumGMV | Dataset | -837.57 | 583.62 | 0.231 | 0.03\*\*\* |
| Age | -567.28\* | 257.13 |
| Sex | 1601.81\*\* | 597.25 |
| ICV | 2010.06\*\*\* | 282.82 |
| Diagnosis (SCD) | -2767.17\*\*\* | 817.67 |
| Diagnosis (MCI) | -1668.07\* | 813.98 |
| Diagnosis (AD) | -3651.80\*\*\* | 1054.42 |

\**p* < .05, \*\**p* < .01, \*\*\**p* < .001; B, unstandardized beta coefficient; SE, standard error; ICV, estimated total intracranial volume; CT, cortical thickness; GMV, grey matter volume. Cognitively unimpaired (CU) women monolinguals were used as the referent group for all regressions.

Table S2. *Regression models for right hemisphere language-related ROIs (Model 2)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Region | Model 2 | | | | R2Δ |
| Predictor | B | SE | R2adjusted |
| IFG  Pars OpercularisCT | Dataset | 0.03\* | 0.01 | 0.05 | 0.02\*\* |
| Age | -0.01 | 0.01 |
| Sex | -0.01 | 0.01 |
| Diagnosis (SCD) | 0.00 | 0.02 |
| Diagnosis (MCI) | -0.02 | 0.02 |
| Diagnosis (AD) | -0.06\* | 0.02 |
| Supramarginal GyrusCT | Dataset | 0.04\*\* | 0.01 | 0.12 | 0.06\*\*\* |
| Age | -0.01\* | 0.01 |
| Sex | -0.02 | 0.01 |
| Diagnosis (SCD) | 0.04\* | 0.02 |
| Diagnosis (MCI) | -0.03 | 0.02 |
| Diagnosis (AD) | -0.06\* | 0.02 |
| Inferior Parietal GyrusCT | Dataset | 0.01 | 0.01 | 0.13 | 0.09\*\*\* |
| Age | 0.00 | 0.01 |
| Sex | -0.02 | 0.01 |
| Diagnosis (SCD) | 0.00 | 0.02 |
| Diagnosis (MCI) | -0.04 | 0.02 |
| Diagnosis (AD) | -0.13\*\*\* | 0.03 |
| CerebellumGMV | Dataset | -730.60 | 604.90 | 0.20 | .02\*\* |
| Age | -565.00\* | 266.50 |
| Sex | 1618.97\*\* | 619.02 |
| ICV | 1944.12\*\*\* | 293.13 |
| Diagnosis (SCD) | -2512.69\*\* | 847.48 |
| Diagnosis (MCI) | -1611.23 | 843.65 |
| Diagnosis (AD) | -3063.79\*\* | 1092.85 |
| ThalamusGMV | Dataset | 52.18 | 73.74 | 0.27 | .02\*\* |
| Age | -103.86\*\* | 32.49 |
| Sex | 141.61 | 75.46 |
| ICV | 318.12\*\*\* | 35.73 |
| Diagnosis (SCD) | 42.32 | 103.31 |
| Diagnosis (MCI) | 18.98 | 102.84 |
| Diagnosis (AD) | -301.56\* | 133.22 |

\**p* < .05, \*\**p* < .01, \*\*\**p* < .001; B, unstandardized beta coefficient; SE, standard error; ICV, estimated total intracranial volume; CT, cortical thickness; GMV, grey matter volume. Cognitively unimpaired (CU) women monolinguals were used as the referent group for all regressions.

Table S3. *Regression models for left hemisphere AD-related ROIs (Model 2)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Region | Model 2 | | | | R2Δ |
| Predictor | B | SE | R2adjusted |
| HippocampusGMV | Dataset | -15.19 | 42.98 | 0.30 | 0.13\*\*\* |
| Age | -123.31\*\*\* | 18.94 |
| Sex | 189.97\*\*\* | 43.99 |
| ICV | 90.15\*\*\* | 20.83 |
| Diagnosis (SCD) | -18.26 | 60.22 |
| Diagnosis (MCI) | -189.28\*\* | 59.95 |
| Diagnosis (AD) | -558.86\*\*\* | 77.66 |
| SubiculumGMV | Dataset | -10.32 | 6.50 | 0.29 | 0.11\*\*\* |
| Age | -18.86\*\*\* | 2.87 |
| Sex | 29.84\*\*\* | 6.65 |
| ICV | 10.15\*\* | 3.15 |
| Diagnosis (SCD) | -10.39 | 9.11 |
| Diagnosis (MCI) | -31.44\*\*\* | 9.07 |
| Diagnosis (AD) | -83.90\*\*\* | 11.75 |
| Parahippocampal GyrusCT | Dataset | 0.00 | 0.03 | 0.17 | 0.06\*\*\* |
| Age | -0.09\*\*\* | 0.02 |
| Sex | 0.04 | 0.03 |
| Diagnosis (SCD) | 0.04 | 0.05 |
| Diagnosis (MCI) | -0.06 | 0.05 |
| Diagnosis (AD) | -0.26\*\*\* | 0.06 |
| Entorhinal CortexCT | Dataset | -0.08 | 0.05 | 0.22 | 0.10\*\*\* |
| Age | -0.11\*\*\* | 0.02 |
| Sex | 0.09\* | 0.04 |
| Diagnosis (SCD) | 0.00 | 0.07 |
| Diagnosis (MCI) | -0.17\* | 0.07 |
| Diagnosis (AD) | -0.52\*\*\* | 0.09 |

\**p* < .05, \*\**p* < .01, \*\*\**p* < .001; B, unstandardized beta coefficient; SE, standard error; ICV, estimated total intracranial volume; CT, cortical thickness; GMV, grey matter volume. Cognitively unimpaired (CU) women monolinguals were used as the referent group for all regressions.

Table S4. *Regression models for right hemisphere AD-related ROIs (Model 2)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Region | Model 2 | | | | R2Δ |
| Predictor | B | SE | R2adjusted |
| Parahippocampal GyrusCT | Dataset | -0.03 | 0.03 | 0.13 | 0.03\*\*\* |
| Age | -0.07\*\*\* | 0.01 |
| Sex | 0.01 | 0.03 |
| Diagnosis (SCD) | 0.04 | 0.04 |
| Diagnosis (MCI) | -0.03 | 0.04 |
| Diagnosis (AD) | -0.16\*\* | 0.05 |
| Entorhinal CortexCT | Dataset | -0.04 | 0.05 | 0.16 | 0.07\*\*\* |
| Age | -0.09\*\*\* | 0.02 |
| Sex | 0.07 | 0.04 |
| Diagnosis (SCD) | -0.03 | 0.07 |
| Diagnosis (MCI) | -0.17\* | 0.07 |
| Diagnosis (AD) | -0.44\*\*\* | 0.09 |

\**p* < .05, \*\**p* < .01, \*\*\**p* < .001; B, unstandardized beta coefficient; SE, standard error; ICV, estimated total intracranial volume; CT, cortical thickness. Cognitively unimpaired (CU) women monolinguals were used as the referent group for all regressions.