

Supplementary Table 4. Comparison of cortical thickness according to impulsivity level in older participants

| Cortical regions | High impulsivity group (N=13) | | Low impulsivity group (N=31) | | F _(1,39) | p-value |
|------------------------------------|-------------------------------|-------|------------------------------|-------|---------------------|---------|
| | Mean | SD | Mean | SD | | |
| Left hemisphere | | | | | | |
| Frontomarginal gyrus | 2.334 | 0.113 | 2.383 | 0.156 | 1.466 | 0.233 |
| Inferior occipital gyrus | 2.506 | 0.247 | 2.615 | 0.214 | 2.014 | 0.164 |
| Paracentral lobule | 2.331 | 0.217 | 2.416 | 0.156 | 0.674 | 0.417 |
| Subcentral gyrus | 2.625 | 0.121 | 2.682 | 0.156 | 0.935 | 0.340 |
| Transverse frontopolar gyrus | 2.553 | 0.208 | 2.679 | 0.152 | 2.931 | 0.095 |
| Anterior cingulate gyrus | 2.777 | 0.151 | 2.789 | 0.129 | 0.222 | 0.640 |
| Anterior mid-cingulate gyrus | 2.637 | 0.162 | 2.688 | 0.151 | 0.154 | 0.697 |
| Posterior mid-cingulate gyrus | 2.615 | 0.108 | 2.576 | 0.133 | 1.992 | 0.166 |
| Dorsal posterior cingulate gyrus | 2.814 | 0.188 | 2.887 | 0.231 | 0.613 | 0.438 |
| Ventral posterior cingulate gyrus | 2.468 | 0.247 | 2.513 | 0.280 | 1.605 | 0.213 |
| Cuneus | 1.706 | 0.096 | 1.763 | 0.209 | 0.885 | 0.353 |
| Pars opercularis | 2.763 | 0.118 | 2.796 | 0.120 | 1.992 | 0.166 |
| Pars orbitalis | 2.598 | 0.289 | 2.783 | 0.216 | 3.224 | 0.080 |
| Pars triangularis | 2.566 | 0.145 | 2.648 | 0.103 | 2.380 | 0.131 |
| Middle frontal gyrus | 2.653 | 0.155 | 2.692 | 0.116 | 1.036 | 0.315 |
| Superior frontal gyrus | 2.915 | 0.169 | 2.961 | 0.113 | 0.340 | 0.563 |
| Long insular gyrus | 3.005 | 0.155 | 2.991 | 0.211 | 0.053 | 0.819 |
| Short insular gyrus | 3.354 | 0.170 | 3.388 | 0.249 | 0.025 | 0.875 |
| Middle occipital gyrus | 2.553 | 0.162 | 2.605 | 0.186 | 0.356 | 0.554 |
| Superior occipital gyrus | 2.170 | 0.251 | 2.236 | 0.168 | 0.947 | 0.336 |
| Lateral occipito-temporal gyrus | 2.821 | 0.166 | 2.759 | 0.279 | 0.692 | 0.411 |
| Lingual gyrus | 1.885 | 0.068 | 1.898 | 0.194 | 0.197 | 0.660 |
| Parahippocampal gyrus | 3.052 | 0.176 | 3.021 | 0.223 | 0.084 | 0.773 |
| Orbital gyrus | 2.639 | 0.108 | 2.626 | 0.153 | 0.449 | 0.507 |
| Angular gyrus | 2.642 | 0.132 | 2.666 | 0.123 | 0.492 | 0.487 |
| Supramarginal gyrus | 2.683 | 0.171 | 2.768 | 0.133 | 3.353 | 0.075 |
| Superior parietal lobule | 2.392 | 0.148 | 2.407 | 0.153 | 0.140 | 0.711 |
| Postcentral gyrus | 2.118 | 0.097 | 2.226 | 0.170 | 2.705 | 0.108 |
| Precentral gyrus | 2.808 | 0.160 | 2.862 | 0.144 | 0.602 | 0.443 |
| Precuneus | 2.417 | 0.165 | 2.522 | 0.136 | 4.594 | 0.038 |
| Straight gyrus | 2.607 | 0.133 | 2.622 | 0.365 | 0.004 | 0.951 |
| Subcallosal gyrus | 2.399 | 0.278 | 2.464 | 0.368 | 0.036 | 0.850 |
| Anterior transverse temporal gyrus | 2.163 | 0.194 | 2.208 | 0.257 | 0.061 | 0.806 |
| Lateral superior temporal gyrus | 2.955 | 0.199 | 3.050 | 0.186 | 3.372 | 0.074 |
| Planum polare | 3.311 | 0.205 | 3.377 | 0.279 | 0.574 | 0.453 |
| Planum temporale | 2.511 | 0.184 | 2.561 | 0.136 | 0.941 | 0.338 |
| Inferior temporal gyrus | 2.854 | 0.200 | 2.966 | 0.187 | 1.505 | 0.227 |
| Middle temporal gyrus | 3.064 | 0.165 | 3.019 | 0.206 | 0.795 | 0.378 |
| Right hemisphere | | | | | | |
| Frontomarginal gyrus | 2.363 | 0.250 | 2.424 | 0.147 | 1.349 | 0.253 |
| Inferior occipital gyrus | 2.733 | 0.149 | 2.763 | 0.226 | 0.002 | 0.963 |
| Paracentral lobule | 2.410 | 0.189 | 2.385 | 0.164 | 0.126 | 0.725 |
| Subcentral gyrus | 2.628 | 0.178 | 2.718 | 0.172 | 0.964 | 0.332 |
| Transverse frontopolar gyrus | 2.586 | 0.231 | 2.610 | 0.166 | 0.054 | 0.817 |
| Anterior cingulate gyrus | 2.688 | 0.130 | 2.747 | 0.116 | 2.348 | 0.134 |
| Anterior mid-cingulate gyrus | 2.806 | 0.146 | 2.790 | 0.114 | 0.150 | 0.700 |
| Posterior mid-cingulate gyrus | 2.635 | 0.111 | 2.652 | 0.145 | 0.112 | 0.740 |
| Dorsal posterior cingulate gyrus | 2.880 | 0.126 | 2.892 | 0.174 | 0.269 | 0.607 |
| Ventral posterior cingulate gyrus | 2.590 | 0.241 | 2.584 | 0.331 | 0.204 | 0.654 |
| Cuneus | 1.738 | 0.069 | 1.773 | 0.196 | 0.370 | 0.547 |
| Pars opercularis | 2.799 | 0.120 | 2.780 | 0.125 | 0.151 | 0.700 |
| Pars orbitalis | 2.722 | 0.189 | 2.796 | 0.196 | 0.371 | 0.546 |
| Pars triangularis | 2.639 | 0.163 | 2.693 | 0.117 | 1.638 | 0.208 |
| Middle frontal gyrus | 2.642 | 0.130 | 2.723 | 0.108 | 2.501 | 0.122 |
| Superior frontal gyrus | 2.933 | 0.165 | 2.955 | 0.121 | 0.063 | 0.803 |
| Long insular gyrus | 3.072 | 0.324 | 3.080 | 0.218 | 0.718 | 0.402 |
| Short insular gyrus | 3.313 | 0.245 | 3.257 | 0.291 | 1.653 | 0.206 |
| Middle occipital gyrus | 2.601 | 0.114 | 2.625 | 0.194 | 0.131 | 0.719 |
| Superior occipital gyrus | 2.160 | 0.204 | 2.211 | 0.187 | 0.385 | 0.539 |
| Lateral occipito-temporal gyrus | 2.771 | 0.113 | 2.786 | 0.228 | 0.024 | 0.877 |
| Lingual gyrus | 1.953 | 0.097 | 1.948 | 0.187 | 0.044 | 0.836 |
| Parahippocampal gyrus | 3.200 | 0.231 | 3.119 | 0.225 | 3.905 | 0.055 |
| Orbital gyrus | 2.618 | 0.139 | 2.720 | 0.151 | 2.223 | 0.144 |
| Angular gyrus | 2.627 | 0.139 | 2.661 | 0.117 | 1.034 | 0.316 |
| Supramarginal gyrus | 2.680 | 0.150 | 2.744 | 0.146 | 0.983 | 0.328 |
| Superior parietal lobule | 2.364 | 0.114 | 2.382 | 0.168 | 0.008 | 0.928 |
| Postcentral gyrus | 2.057 | 0.159 | 2.203 | 0.156 | 4.495 | 0.040 |
| Precentral gyrus | 2.846 | 0.193 | 2.824 | 0.154 | 0.144 | 0.706 |
| Precuneus | 2.468 | 0.166 | 2.499 | 0.135 | 0.431 | 0.515 |
| Straight gyrus | 2.568 | 0.200 | 2.654 | 0.188 | 1.249 | 0.271 |
| Subcallosal gyrus | 2.688 | 0.485 | 2.566 | 0.438 | 1.652 | 0.206 |
| Anterior transverse temporal gyrus | 2.263 | 0.257 | 2.323 | 0.270 | 0.277 | 0.602 |
| Lateral superior temporal gyrus | 2.952 | 0.151 | 3.061 | 0.195 | 3.315 | 0.076 |
| Planum polare | 3.236 | 0.261 | 3.162 | 0.300 | 0.647 | 0.426 |
| Planum temporale | 2.549 | 0.160 | 2.617 | 0.175 | 1.462 | 0.234 |
| Inferior temporal gyrus | 2.895 | 0.209 | 2.996 | 0.173 | 2.296 | 0.138 |
| Middle temporal gyrus | 2.986 | 0.168 | 3.018 | 0.212 | 0.000 | 0.985 |

One-way ANCOVA, including age, sex, education level, and total intracranial volume as covariates, was performed. Significant group differences after Bonferroni correction are presented in bold. Bonferroni correction was applied for multiple comparisons: p<0.05/76=0.000658. SD: standard deviation