**Modulation of default mode network resting-state functional connectivity by antidepressants can predict long-term treatment outcomes in Major Depressive Disorder**

***Supplemental Material***

**1. Participant Inclusion and Exclusion Criteria**

Inclusion criteria were as follows: (1) age between 18 and 60 years; (2) education ≥ 6 years, able to complete all scales and assessments independently; (3) right-handedness; (4) diagnosed by two trained psychiatrists with a current major depressive episode using the Structured Clinical Interview for DSM-IV (SCID-IV); (5) total score of 24 items of the Hamilton Depression Scale (HAMD) ≥ 20; (6) no history of psychotropic medication for at least 2 weeks before enrollment (6 weeks if the patient had taken fluoxetine), or undergone a washout period of at least 2 weeks.

Exclusion criteria: (1) meeting other diagnoses of psychiatric disorders according to DSM-IV (except generalized anxiety disorder), such as schizophrenia, bipolar disorder, or mental disorders related to alcohol and drug dependence; (2) current or previous history of brain organic diseases or loss of consciousness for more than 5 minutes; (3) current or previous history of major physical diseases (including rheumatic immune system diseases, endocrine and metabolic diseases, nervous system diseases, etc.); (4) current serious suicidal ideation or suicide attempt; (5) pregnant or lactating women; (6) color blindness (unable to complete neurocognitive test); (7) use of anticoagulants (heparin, warfarin, etc.), glucocorticoids, or treatment for thyroid diseases in the past 3 months; ( 8) having received any neurocognitive assessment similar to this study in the past 12 months; (9) positive urine drug screening results or abnormal thyroid function test; and (10) any other contraindications to magnetic resonance imaging (MRI).

**2. Antidepressant administration**

After baseline enrollment, the patients received first-line antidepressant treatment according to the psychiatrists’ clinical judgment. Most patients received an open-label antidepressant trial with paroxetine (Lu et al., 2018). Psychiatrists can prescribe combination medications to enhance the antidepressant effects (for example, atypical antipsychotics), and can use hypnotic and sedative drugs (See Table 1). The treatment plan was adjusted under the guidance of psychiatrists at each follow-up time point. The medication index was calculated as the sum of the medication units for a given subject over 6 months based on daily dose definitions proposed by the World Health Organization (WHO; http://www.whocc.no/atc\_ddd\_index/).

**3. MRI data acquisition**

MRI data were collected using a GE magnetic resonance imaging system (Signa HDxT 3.0-tesla scanner) with a 16-channel head coil. During the scanning process, foam padding and earplugs were used to restrict head motion and reduce scanner noise, respectively. T1 weighted image (structure image) was obtained by using the magnetization prepared rapid gradient echo (MPRAGE) with the following parameters: repetition time (TR) = 6.8 ms, echo time (TE) = 2.5 ms, flip angle = 7°, field of view (FOV) = 256 × 256 mm2, matrix size = 256 × 256, slice thickness = 1 mm, voxel size = 1×1×1 mm3. During resting-state functional magnetic resonance imaging (fMRI) scanning, the subjects were required to close their eyes, stay relaxed and awake, and not think about anything special. Resting-state fMRI was performed using a T2\*-weighted echo-planar imaging (EPI) sequence with the following parameters: TR = 2000 ms, TE = 30 ms, flip angle = 90°, FOV = 220×220 mm2, matrix size = 64×64, slice thickness = 4 mm, voxel size = 3.4×3.4×4 mm3, volumes = 180, scanning time = 6 min.

**4. MRI preprocessing**

Various neuroimaging software and programs have been used for MRI data preprocessing. The detailed steps are as follows.

(1) DICOM to NIfTI: Each subject's structural and functional images were converted from the original DICOM to the NIfTI format using the dcm2nii program (https://www.nitrc.org/projects/dcm2nii/).

(2) Skull stripping of structural images: The skull and scalp in the structural images were removed to improve the accuracy of structural image registration to functional images. Automatic skull stripping was first performed using FreeSurfer Automatic Brain Reconstruction Step 1 (auto recon-1, http://surfer.nmr.mgh.harvard.edu) and the brain extraction tool in FSL (https://fsl. fmrib.ox.ac.uk/fsl/fslwiki/). The Tkmedit tool in FreeSurfer was then used to check the integrity of the structural images of the brain and cerebellum. Manual skull stripping was further implemented, the dura mater and skull were removed manually, and the excess brain tissue removed by the automatic skull stripping step was filled back.

(3) Nonlinear registration: Nonlinear registration of the structural images to the standard Montreal Neurological Institute (MNI) template was performed using BioImage Suite (https://bioimagesuiteweb.github.io/-webapp/). All the processed structural images were manually checked to ensure registration reliability.

(4) Slice timing: The slice timing of the functional images was performed using SPM8 (https://www.fil.ion.ac.uk/spm). Because the scanning layers collected by the GE scanner are 1, 3, 5, ..., 33, 2, 4, 6, ..., 32, the acquisition time of each brain layer will be slightly different. Therefore, the first layer was used as the reference layer for slice timing, and the timing of the different layers of the brain were corrected to the same time point as the first layer.

(5) Motion correction: Rigid body co-registration in SPM8 was used to adjust the functional image to the same position, with only translation (moving in the X, Y, and Z axes) and rotation (rotating around the X, Y, and Z axes) allowed. The 24 head movement parameters and frame to frame displacement (FFD) at each time point were generated during head movement correction. In this study, patients with qualified head movements were defined as having an average FFD < 0.15 mm.

(6) Linear registration: Linear registration of each subject's structural images to a functional image was also performed using the BioImage Suite. All the registered structural images were manually checked. If the automatic registration fails, the structural image is adjusted according to the position of the subject's functional image using the manual adjustment program in the BioImage Suite.

(7) Covariate regression: Covariate regression was performed using BioImage Suite to regress covariates that were not of interest in fMRI signals, including linear, quadratic, cubic drift, a 24-parameter model of motion, the mean cerebrospinal fluid signal, and the mean white matter signal. Since previous studies have indicated a better brain-behavior association with global signal regression (GSR) (Greene, Gao, Scheinost, & Constable, 2018; Li et al., 2019), we performed GSR in our main analysis, which uses linear regression to remove the whole-brain average signal from each individual voxel. In our control analysis, we performed all analyses without GSR (see Supplementary Table 5). The data were then temporally smoothed using a zero-mean unit-variance low-pass Gaussian filter (cutoff frequency of 0.12 Hz).

**Supplemental References**

Greene, A.S., Gao, S., Scheinost, D., & Constable, R.T. (2018). Task-induced brain state manipulation improves prediction of individual traits. *Nature Communications, 9*(1), 2807. doi: 10.1038/s41467-018-04920-3

Li, J., Kong, R., Liégeois, R., Orban, C., Tan, Y., Sun, N., . . . Yeo, B.T.T. (2019). Global signal regression strengthens association between resting-state functional connectivity and behavior. *NeuroImage, 196*, 126-141. doi: 10.1016/j.neuroimage.2019.04.016

Lu, X.W., Guo, H., Sun, J.R., Dong, Q.L., Zhao, F.T., Liao, X.H., . . . Li, L.J. (2018). A shared effect of paroxetine treatment on gray matter volume in depressive patients with and without childhood maltreatment: A voxel-based morphometry study. C*NS Neuroscience & Therapeutics*, 24(11), 1073-1083. doi: 10.1111/cns.13055

**Supplementary Figure 1**

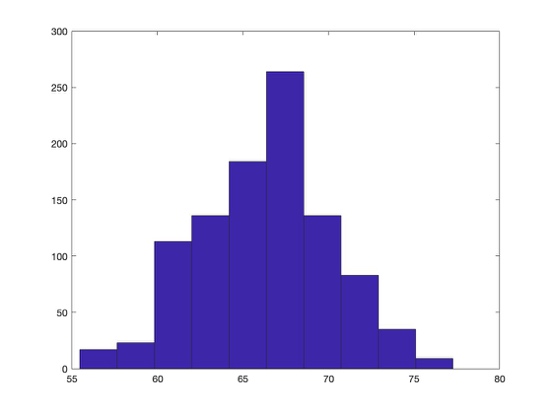
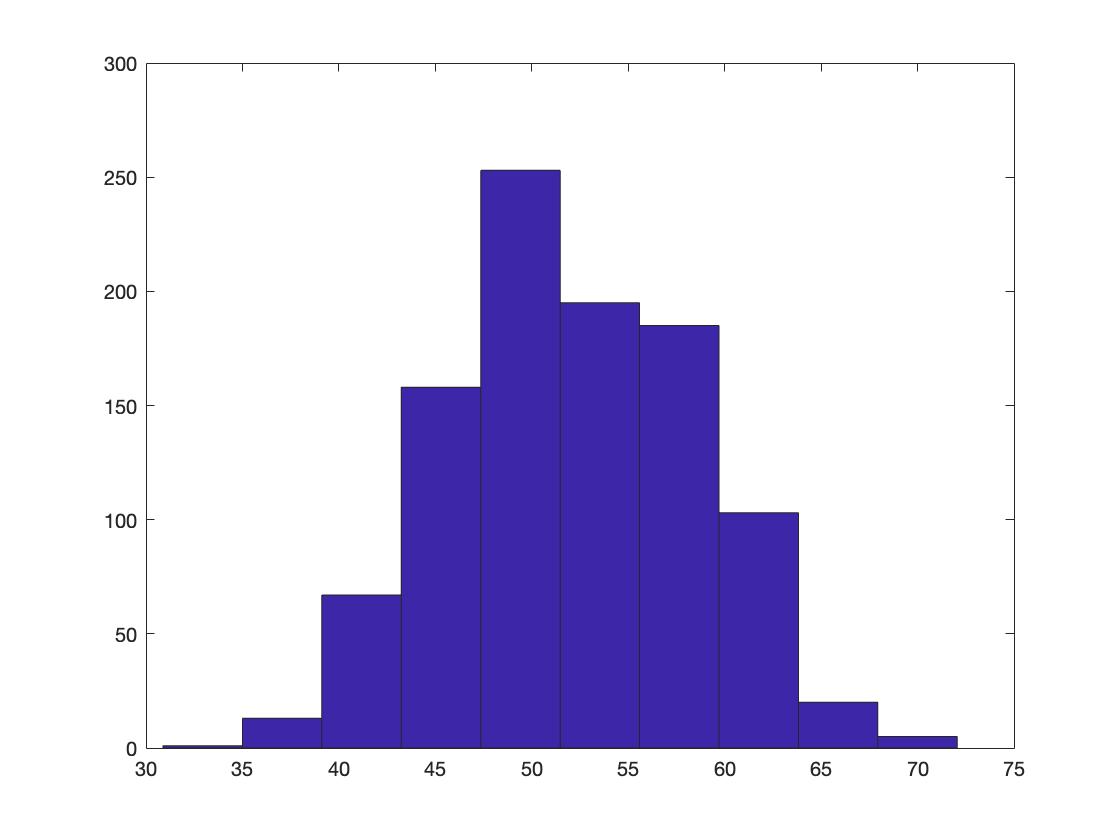


Fig S1. Permutation distribution of the accuracy obtained by DMN nCPM model classifying remitters/non-remitters under edge selection P = 0.01. x axis indicates the accuracy rate yielded by permutation tests and y-labels represent and occurrence number, respectively. The figure reveals that the actual DMN nCPM model for predicting remission in MDD achived accuracy better than all the permutation classification accuracy.

**Supplementary Figure 2A**



**Supplementary Figure 2B**

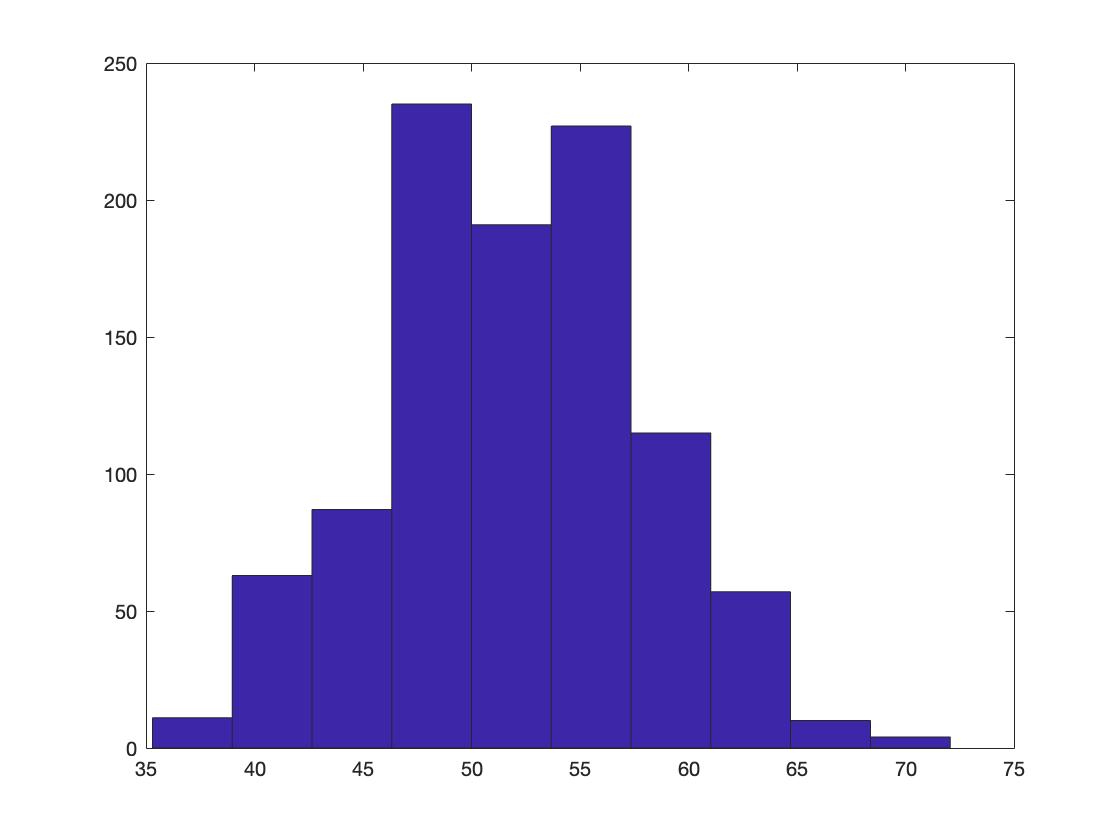


Fig S2A. Permutation distribution of the accuracy obtained by DMN nCPM model classifying recurring MDD/stable MDD under edge selection P = 0.05. Fig S2B. Permutation distribution of the accuracy obtained by DMN nCPM model classifying recurring MDD/stable MDD under edge selection P = 0.1. x axis indicates the accuracy rate yielded by permutation tests and y-labels represent and occurrence number, respectively. The figures reveal that the actual DMN nCPM models for predicting recurrence in MDD achived accuracy better than all the permutation classification accuracy.

**Supplementary Table 1. Twelve ROIs excluded from functional network construction**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Node | Network | MNI coordinate  (x, y, z) | | |
| R-temporal pole | DMN | 27.2 | 11.6 | -39.2 |
| R-inferior temporal gyrus | DMN | 31.5 | 0.7 | -44.4 |
| R-cerebellum | CBN | 23.5 | -35.9 | -43.0 |
| R-cerebellum | CBN | 46.0 | -46.5 | -42.5 |
| R-cerebellum | CBN | 33.8 | -47.2 | -53.9 |
| R-brainstem | CBN | 6.0 | -22.2 | -42.3 |
| L-orbitofrontal cortex | VAN | -5.8 | 18.2 | -21.6 |
| L-middle temporal gyrus | DMN | -22.9 | 9.0 | -38.8 |
| L-inferior temporal gyrus | CON | -51.8 | -18.2 | -28.8 |
| L-Cerebellum | CBN | -34.6 | -50.3 | -54.0 |
| L-Cerebellum | CBN | -46.4 | -46.8 | -42.9 |
| L-Brainstem | CBN | -6.1 | -18.9 | -36.8 |
| L-Temporal pole | DMN | 27.2 | 11.6 | -39.2 |

R, right; L, left; CON, cingulo-opercular; DMN, default mode network; VAN, ventral attention network; CBN, cerebellum network; MNI, Montreal Neurological Institute.

**Supplementary Table 2.** GLM-RM analysis of rsFNC between remitters and non-remitters

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Networks | Baseline | | 6-month | | Time by remission | | | Time | | |
|  | remitters | non-remitters | remitters | non-remitters | *F1* | *P1* | *η21 (95%CI)* | *F2* | *P2* | *η22 (95%CI)* |
| SMN | 0.374 ± 0.087 | 0.391 ± 0.087 | 0.375 ± 0.102 | 0.357 ± 0.112 | 2.378 | 0.126 | 0.022 (0, 0.112) | 2.234 | 0.138 | 0.020 (0, 0.107) |
| CON | 0.291 ± 0.083 | 0.282 ± 0.101 | 0.268 ± 0.089 | 0.268 ± 0.099 | 0.147 | 0.702 | 0.001 (0, 0.059) | 2.199 | 0.141 | 0.020 (0, 0.120) |
| AUN | 0.418 ± 0.125 | 0.423 ± 0.098 | 0.429 ± 0.108 | 0.421 ± 0.093 | 0.160 | 0.690 | 0.002 (0, 0.047) | 0.071 | 0.790 | 0.001 (0, 0.044) |
| **DMN** | 0.112 ± 0.041 | 0.097 ± 0.030 | 0.097 ± 0.034 | 0.105 ± 0.028 | **6.763** | **0.011\*** | **0.059 (0.003, 0.175)** | 0.470 | 0.495 | 0.004 (0, 0.062) |
| VN | 0.297 ± 0.102 | 0.280 ± 0.084 | 0.279 ± 0.088 | 0.298 ± 0.105 | 2.878 | 0.093 | 0.026 (0, 0.097) | 0.023 | 0.880 | 0.000 (0, 0.036) |
| FPN | 0.255 ± 0.076 | 0.233 ± 0.059 | 0.248 ± 0.066 | 0.251 ± 0.068 | 1.681 | 0.198 | 0.015 (0, 0.057) | 0.279 | 0.599 | 0.003 (0, 0.051) |
| SN | 0.264 ± 0.090 | 0.252 ± 0.111 | 0.245 ± 0.086 | 0.232 ± 0.072 | 0.003 | 0.956 | 0.000 (0, 0.046) | 3.031 | 0.085 | 0.027 (0, 0.115) |
| SCN | 0.203 ± 0.082 | 0.171 ± 0.057 | 0.198 ± 0.074 | 0.192 ± 0.063 | 1.622 | 0.206 | 0.015 (0, 0.087) | 0.630 | 0.429 | 0.006 (0, 0.062) |
| VAN | 0.360 ± 0.144 | 0.336 ± 0.142 | 0.364 ± 0.161 | 0.391 ± 0.166 | 1.683 | 0.197 | 0.015 (0, 0.106) | 2.251 | 0.136 | 0.020 (0, 0.117) |
| DAN | 0.138 ± 0.081 | 0.118 ± 0.090 | 0.125 ± 0.090 | 0.096 ± 0.087 | 0.175 | 0.677 | 0.002 (0, 0.035) | 2.187 | 0.142 | 0.020 (0, 0.082) |
| CBN | 0.118 ± 0.035 | 0.107 ± 0.039 | 0.115 ± 0.039 | 0.100 ± 0.025 | 0.324 | 0.570 | 0.003 (0, 0.054) | 1.687 | 0.197 | 0.015 (0, 0.086) |

SMN, somatosensory network; CON, cingular opercular network; AUN, auditory network; DMN, default mode network; VN, visual network; FPN, frontoparietal network; SN, salience network; SCN, subcortical network; VAN, ventral attention network; DAN, dorsal attention network; CBN, cerebellum network; GLM-RM, General Linear Model Repeated Measure; resting-state functional network connectivity.

\* *P* ≤ 0.05; \*\* *P* ≤ 0.01; \*\*\* *P* ≤ 0.001.

**Supplementary Table 3.** GLM-RM analysis of rsFNC in stable and recurring MDD

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Networks | Baseline | | 6-month | | Time by recurrence | | | Time | | |
|  | stable MDD | recurring MDD | stable MDD | recurring MDD | *F1* | *P1* | *η2 (95%CI)* | *F2* | *P2* | *η2 (95%CI)* |
| SMN | 0.358 ± 0.082 | 0.383 ± 0.092 | 0.352 ± 0.098 | 0.367 ± 0.086 | 0.298 | 0.587 | 0.128 (0, 0.096) | 1.165 | 0.284 | 0.022 (0, 0.132) |
| CON | 0.300 ± 0.094 | 0.301 ± 0.071 | 0.280 ± 0.092 | 0.289 ± 0.093 | 0.178 | 0.675 | 0.027 (0, 0.081) | 1.189 | 0.279 | 0.001 (0, 0.143) |
| AUN | 0.371 ± 0.111 | 0.419 ± 0.099 | 0.414 ± 0.102 | 0.433 ± 0.106 | 1.324 | 0.254 | 0.027 (0, 0.132) | 2.589 | 0.112 | 0.002 (0, 0.166) |
| **DMN** | 0.091 ± 0.036 | 0.123 ± 0.045 | 0.101 ± 0.035 | 0.096 ± 0.034 | **10.51** | **0.002\*\*** | **0.146 (0.038, 0.329)** | 0.616 | 0.436 | 0.059 (0, 0.169) |
| VN | 0.301 ± 0.089 | 0.280 ± 0.111 | 0.291 ± 0.071 | 0.291 ± 0.107 | 0.684 | 0.411 | 0.032 (0, 0.153) | 0.640 | 0.427 | 0.026 (0, 0.076) |
| FPN | 0.245 ± 0.079 | 0.265 ± 0.087 | 0.258 ± 0.066 | 0.252 ± 0.069 | 1.279 | 0.262 | 0.019 (0, 0.125) | 0.007 | 0.935 | 0.015 (0, 0.071) |
| SN | 0.246 ± 0.096 | 0.257 ± 0.085 | 0.229 ± 0.089 | 0.252 ± 0.084 | 0.395 | 0.532 | 0.059 (0, 0.086) | 1.027 | 0.315 | 0.000 (0, 0.111) |
| SCN | 0.181 ± 0.067 | 0.206 ± 0.072 | 0.201 ± 0.071 | 0.210 ± 0.080 | 0.888 | 0.350 | 0.013 (0, 0.104) | 0.95 | 0.333 | 0.015 (0, 0.119) |
| VAN | 0.357 ± 0.160 | 0.369 ± 0.143 | 0.389 ± 0.184 | 0.339 ± 0.154 | 1.873 | 0.176 | 0.028 (0, 0.177) | 0.015 | 0.903 | 0.015 (0, 0.088) |
| DAN | 0.124 ± 0.069 | 0.129 ± 0.080 | 0.117 ± 0.097 | 0.109 ± 0.074 | 0.217 | 0.643 | 0.003 (0, 0.095) | 1.029 | 0.314 | 0.002 (0, 0.133) |
| CBN | 0.123 ± 0.043 | 0.115 ± 0.032 | 0.117 ± 0.038 | 0.112 ± 0.041 | 0.328 | 0.569 | 0.005 (0, 0.095) | 0.811 | 0.371 | 0.003 (0, 0.112) |

SMN, somatosensory network; CON, cingular opercular network; AUN, auditory network; DMN, default mode network; VN, visual network; FPN, frontoparietal network; SN, salience network; SCN, subcortical network; VAN, ventral attention network; DAN, dorsal attention network; CBN, cerebellum network; GLM-RM, General Linear Model Repeated Measure; resting-state functional network connectivity.

\* *P* ≤ 0.05; \*\* *P* ≤ 0.01; \*\*\* *P* ≤ 0.001.

**Supplementary Table 4.** rsFNC in MDD (baseline and follow-up) compared with HC

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Networks | Baseline MDD | 6-month MDD | Baseline HC | Baseline MDD vs. 6-month MDD | | | Baseline MDD vs. Baseline HC | | | 6-month MDD vs. Baseline HC | | |
| *F1* | *P1* | *η21 (95%CI)* | *F2* | *P2* | *η22 (95%CI)* | *F3* | *P3* | *η23 (95%CI)* |
| SMN | 0.378 ± 0.087 | 0.371 ± 0.104 | 0.380 ± 0.096 | 1.001 | 0.319 | 0.002 (0, 0.112) | 0.104 | 0.747 | 0.000 (0, 0.021) | 0.550 | 0.459 | 0.002 (0, 0.030) |
| **CON** | 0.289 ± 0.087 | 0.268 ± 0.091 | 0.298 ± 0.103 | **3.937** | **0.049\*** | **0.014 (0.001, 0.053)** | 0.361 | 0.549 | 0.002 (0, 0.028) | **5.151** | **0.024\*** | **0.020 (0.001, 0.071)** |
| AUN | 0.419 ± 0.118 | 0.427 ± 0.105 | 0.436 ± 0.131 | 0.343 | 0.559 | 0.001 (0, 0.047) | 1.848 | 0.175 | 0.005 (0, 0.038) | 0.844 | 0.359 | 0.002 (0, 0.027) |
| **DMN** | 0.108 ± 0.039 | 0.099 ± 0.033 | 0.111 ± 0.040 | **6.931** | **0.010\*\*** | **0.016 (0.001, 0.175)** | 0.214 | 0.644 | 0.001 (0, 0.025) | **6.535** | **0.011\*** | **0.026 (0.002, 0.074)** |
| VN | 0.293 ± 0.098 | 0.283 ± 0.093 | 0.288 ± 0.106 | 0.899 | 0.345 | 0.003 (0, 0.097) | 0.084 | 0.772 | 0.001 (0, 0.025) | 0.215 | 0.644 | 0.001 (0, 0.022) |
| FPN | 0.250 ± 0.072 | 0.249 ± 0.066 | 0.255 ± 0.067 | 0.062 | 0.804 | 0.000 (0, 0.057) | 0.304 | 0.582 | 0.001 (0, 0.027) | 0.472 | 0.493 | 0.003 (0, 0.030) |
| **SN** | 0.261 ± 0.095 | 0.242 ± 0.082 | 0.257 ± 0.083 | **4.952** | **0.028\*** | **0.012 (0.001, 0.046)** | 0.300 | 0.584 | 0.001 (0, 0.024) | 1.327 | 0.251 | 0.009 (0, 0.045) |
| SCN | 0.196 ± 0.078 | 0.197 ± 0.071 | 0.190 ± 0.079 | 0.081 | 0.776 | 0.000 (0, 0.087) | 0.199 | 0.656 | 0.001 (0, 0.026) | 0.377 | 0.540 | 0.002 (0, 0.030) |
| **VAN** | 0.355 ± 0.143 | 0.371 ± 0.162 | 0.430 ± 0.171 | 0.989 | 0.322 | 0.003 (0, 0.106) | **13.67** | **0.0003\*\*\*** | **0.053 (0.014, 0.116)** | **8.584** | **0.004\*\*** | **0.030 (0.003, 0.084)** |
| DAN | 0.133 ± 0.083 | 0.118 ± 0.090 | 0.118 ± 0.090 | 2.224 | 0.139 | 0.007 (0, 0.035) | 1.815 | 0.179 | 0.008 (0, 0.044) | 0.002 | 0.963 | 0.000 (0, 0.020) |
| CBN | 0.115 ± 0.036 | 0.111 ± 0.036 | 0.111 ± 0.033 | 0.974 | 0.326 | 0.003 (0, 0.054) | 1.552 | 0.214 | 0.004 (0, 0.034) | 0.127 | 0.722 | 0.000 (0, 0.021) |

SMN, somatosensory network; CON, cingular opercular network; AUN, auditory network; DMN, default mode network; VN, visual network; FPN, frontoparietal network; SN, salience network; SCN, subcortical network; VAN, ventral attention network; DAN, dorsal attention network; CBN, cerebellum network; GLM-RM, General Linear Model Repeated Measure; resting-state functional network connectivity.

\* *P* ≤ 0.05; \*\* *P* ≤ 0.01; \*\*\* *P* ≤ 0.001.

**Supplementary Table 5.** Model performance of nCPM in classifying non-remitters and remitters under different edge selection thresholds

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Networks | CPM performance  (edge selection threshold P = 0.01) | | | | CPM performance  (edge selection threshold P = 0.05) | | | | CPM performance  (edge selection threshold P = 0.1) | | | | |
| accuracy | sensitivitya | specificityb | *P* | accuracy | sensitivity | specificity | *P* | accuracy | sensitivity | specificity | *P* |
| SMN | 76.4 | 0 | 100 | / | 63.6 | 11.5 | 79.8 | / | 62.7 | 19.2 | 76.2 | / |
| CON | 76.4 | 0 | 100 | / | 71.8 | 0 | 94.0 | / | 74.5 | 19.2 | 91.7 | 0.658 |
| AUN | - | - | - | - | 72.7 | 0 | 95.2 | / | 76.4 | 0 | 100 | / |
| DMN | **80.0** | **46.2** | **90.5** | **< 0.001** | 67.3 | 34.6 | 77.4 | 0.260 | 66.4 | 26.9 | 78.6 | 0.406 |
| VN | 69.1 | 19.2 | 84.5 | 0.614 | 54.5 | 34.6 | 60.7 | / | 62.7 | 26.9 | 73.8 | / |
| FPN | 76.4 | 0 | 100 | / | 58.2 | 30.7 | 66.7 | / | 66.4 | 26.9 | 78.6 | 0.122 |
| SN | - | - | - | - | 76.4 | 0 | 100 | / | 76.4 | 0 | 100 | / |
| SCN | 76.4 | 0 | 100 | / | 76.4 | 0 | 100 | / | 76.4 | 0 | 100 | / |
| VAN | - | - | - | - | 76.4 | 0 | 100 | / | 76.4 | 0 | 100 | / |
| DAN | - | - | - | - | 71.8 | 0 | 94.0 | / | 76.4 | 0 | 100 | / |
| CBN | 73.6 | 19.2 | 90.5 | 0.101 | 61.8 | 26.9 | 72.6 | 0.829 | 55.5 | 38.5 | 60.7 | / |
| Whole-brain | 59.0 | 15.4 | 72.6 | / | 60.9 | 7.7 | 77.4 | / | 65.5 | 7.7 | 83.3 | / |

ΔrsFC, change in pre- and post-treatment resting-state functional connectivity strength; nCPM, network connectome-based predictive modeling; SMN, somatosensory network; CON, cingulo-opercular; AUN, auditory network; DMN, default mode network; VN, visual network; FPN, frontoparietal network; SN, salience network; SCN, subcortical network; VAN, ventral attention network; DAN, dorsal attention network; CBN, cerebellum network; -, no features were selected to fit the SVM model; /, permutation tests were not performed since the LOOCV classification was not significant. Model performance with permutation P < 0.0014 is marked in bold.

a Sensitivity (true-positive rate) depicts the proportion of non-remitters who are correctly identified.

b Specificity (true-negative rate) depicts the proportion of remitters who are correctly identified.

**Supplementary Table 6.** Control analyses of DMN nCPM classifying non-remitters and remitters under different edge selection thresholds.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P threshold for feature selection | CPM performance  (100 iterations of 10-fold cross-validation) | | | CPM performance  (including motion as a covariate) | | | CPM performance  (including medication as a covariate) | | | CPM performance  (using 368 templates) | | | CPM performance  (without GSR) | | |
| accuracy | sensitivitya | specificityb | accuracy | sensitivity | specificity | accuracy | sensitivity | specificity | accuracy | Sensitivity | specificity | accuracy | sensitivity | specificity |
| P = 0.01 | 73.8 | 34.3 | 86.0 | 80.0 | 46.2 | 90.5 | 78.2 | 42.3 | 89.3 | 76.4 | 34.6 | 76.4 | 70.0 | 7.7 | 89.2 |
| P = 0.05 | 61.8 | 41.2 | 68.2 | 66.4 | 23.1 | 79.8 | 68.2 | 30.8 | 79.8 | 69.1 | 23.1 | 83.3 | 65.5 | 30.8 | 76.2 |
| P = 0.1 | 62.7 | 38.7 | 70.2 | 63.6 | 30.8 | 73.8 | 60.9 | 26.9 | 71.4 | 78.2 | 34.6 | 91.7 | 74.5 | 34.6 | 86.9 |

nCPM, network connectome-based predictive modeling; GSR, global signal regression.

a Sensitivity (true-positive rate) depicts the proportion of non-remitters who are correctly identified.

b Specificity (true-negative rate) depicts the proportion of remitters who are correctly identified.

**Supplementary Table 7.** Edges appeared in all 110 LOOCV of the DMN nCPM machine learning pipeline, classifying non-remitters and remitters. The consensus edges forming the sustained non-remission network are marked in **bold**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Node 1 | MNI coordinate  (x, y, z) | | | Node 2 | MNI coordinate  (x, y, z) | | | Frequency | ΔrsFC of remitters  (Mean ± SD) | ΔrsFC of non-remitters  (Mean ± SD) |
| *Negative edge set* |  |  |  |  |  |  |  |  |  |  |
| L-anterior prefrontal cortex | **-11.7** | **65.1** | **4.2** | **L-dorsal lateral prefrontal cortex** | **-10.2** | **55.7** | **30.2** | **110** | **0.055±0.244** | **-0.127±0.265** |
| L-anterior prefrontal cortex | **-11.7** | **65.1** | **4.2** | **L-frontal eye field** | **-11.2** | **34.3** | **51.5** | **110** | **0.022±0.237** | **-0.156±0.285** |
| L-anterior prefrontal cortex | **-11.7** | **65.1** | **4.2** | **L-temporal pole** | **-49.5** | **11.1** | **-30.6** | **110** | **0.028±0.292** | **-0.175±0.331** |
| L-anterior prefrontal cortex | **-6.0** | **48.1** | **11.7** | **L-hippocampus** | **-21.5** | **-36.9** | **5.8** | **110** | **0.090±0.275** | **-0.156±0.296** |
| L-dorsal anterior cingulate cortex | **-6.0** | **34.1** | **26.3** | **L-retrolimbic area** | **-7.5** | **-42.1** | **13.3** | **110** | **0.075±0.246** | **-0.120±0.281** |
| L-dorsal anterior cingulate cortex | **-6.0** | **34.1** | **26.3** | **L-hippocampus** | **-21.5** | **-36.9** | **5.8** | **110** | **0.010±0.291** | **-0.197±0.317** |
| L-dorsal lateral prefrontal cortex | **-27.3** | **34.1** | **36.4** | **L-temporal pole** | **-34.7** | **18.6** | **-32.2** | **110** | **0.036±0.263** | **-0.143±0.218** |
| L-dorsal lateral prefrontal cortex | **-27.3** | **34.1** | **36.4** | **L-temporal pole** | **-49.5** | **11.1** | **-30.6** | **110** | **0.027±0.255** | **-0.154±0.220** |
| L-dorsal lateral prefrontal cortex | **-10.2** | **55.7** | **30.2** | **L-hippocampus** | **-21.5** | **-36.9** | **5.8** | **110** | **0.062±0.272** | **-0.128±0.233** |
| L-dorsal lateral prefrontal cortex | -10.2 | 55.7 | 30.2 | L-parahippocampus | -20.7 | -30.8 | -11.1 | 109 | 0.097±0.262 | -0.087±0.350 |
| L-dorsal lateral prefrontal cortex | -27.3 | 34.1 | 36.4 | L-parahippocampus | -20.7 | -30.8 | -11.1 | 108 | 0.010±0.251 | -0.158±0.278 |
| L-frontal eye field | -11.2 | 34.3 | 51.5 | L-supra temporal gyrus | -57.1 | 14.5 | -6.8 | 108 | 0.021±0.305 | -0.168±0.241 |
| L-frontal eye field | -39.4 | 17.2 | 46.7 | L-hippocampus | -32.1 | -40.2 | -4.0 | 106 | 0.062±0.294 | -0.133±0.333 |
| L-orbitofrontal cortex | -5.4 | 29.1 | -10.1 | L-anterior prefrontal cortex | -11.7 | 65.1 | 4.2 | 106 | 0.053±0.244 | -0.099±0.222 |
| L-pars Orbitalis | -46.0 | 28.2 | -7.1 | L-visual association cortex | -41.3 | -75.4 | 22.8 | 94 | 0.097±0.281 | -0.089±0.385 |
| R-angular gyrus | 47.8 | -61.9 | 34.7 | L-angular gyrus | -51.4 | -56.3 | 20.5 | 74 | 0.067±0.249 | -0.085±0.269 |
| R-anterior prefrontal cortex | 8.2 | 45.9 | -1.7 | L-anterior prefrontal cortex | -6.0 | 48.1 | 11.7 | 58 | 0.025±0.288 | -0.146±0.288 |
| R-dorsal anterior cingulate cortex | 7.8 | 34.7 | 17.1 | L-fusiform | -26.7 | -42.7 | -16.1 | 48 | 0.039±0.254 | -0.119±0.306 |
| R-dorsal anterior cingulate cortex | 7.8 | 34.7 | 17.1 | L-retrolimbic area | -7.5 | -42.1 | 13.3 | 27 | 0.044±0.273 | -0.116±0.285 |
| R-dorsal lateral prefrontal cortex | 8.4 | 53.3 | 23.9 | R-parahippocampus | 28.0 | -28.4 | -13.7 | 18 | 0.061±0.269 | -0.086±0.210 |
| R-dorsal lateral prefrontal cortex | 8.4 | 53.3 | 23.9 | L-middle temporal gyrus | -49.7 | 6.4 | -15.2 | 11 | 0.075±0.267 | -0.074±0.250 |
| R-dorsal lateral prefrontal cortex | 8.4 | 53.3 | 23.9 | L-supra temporal gyrus | -57.1 | 14.5 | -6.8 | 8 | 0.043±0.251 | -0.109±0.327 |
| R-dorsal lateral prefrontal cortex | 8.4 | 53.3 | 23.9 | L-hippocampus | -21.5 | -36.9 | 5.8 | 5 | 0.047±0.256 | -0.094±0.239 |
| R-dorsal lateral prefrontal cortex | 8.4 | 53.3 | 23.9 | L-parahippocampus | -20.7 | -30.8 | -11.1 | 4 | 0.017±0.243 | -0.125±0.320 |
| R-frontal eye field | 23.9 | 30.7 | 36.4 | R-temporal pole | 52.8 | 10.9 | -21.8 | 4 | 0.001±0.251 | -0.137±0.265 |
| R-frontal eye field | 23.9 | 30.7 | 36.4 | R-supra temporal gyrus | 56.5 | -8.5 | -14.3 | 3 | 0.039±0.257 | -0.103±0.292 |
| R-frontal eye field | 14.3 | 36.9 | 48.9 | L-dorsal lateral prefrontal cortex | -27.3 | 34.1 | 36.4 | 3 | 0.013±0.281 | -0.146±0.341 |
| R-frontal eye field | 23.9 | 30.7 | 36.4 | L-middle temporal gyrus | -49.7 | 6.4 | -15.2 | 3 | 0.021±0.293 | -0.150±0.390 |
| R-frontal eye field | 14.3 | 36.9 | 48.9 | L-inferior temporal gyrus | -59.0 | -30.0 | 3.5 | 3 | 0.046±0.285 | -0.109±0.302 |
| R-frontal eye field | 14.3 | 36.9 | 48.9 | L-supra temporal gyrus | -57.1 | 14.5 | -6.8 | 3 | 0.038±0.288 | -0.115±0.282 |
| R-frontal eye field | 23.9 | 30.7 | 36.4 | L-supra temporal gyrus | -57.1 | 14.5 | -6.8 | 3 | 0.001±0.256 | -0.135±0.226 |
| R-frontal eye field | 23.9 | 30.7 | 36.4 | L-parahippocampus | -20.7 | -30.8 | -11.1 | 2 | 0.021±0.288 | -0.131±0.260 |
| R-hippocampus | 28.8 | -36.9 | 0.0 | L-inferior temporal gyrus | -59.0 | -30.0 | 3.5 | 2 | 0.048±0.317 | -0.115±0.333 |
| R-orbitofrontal cortex | 13.9 | 56.9 | -16.6 | R-dorsal posterior cingulate cortex | 6.2 | -57.4 | 38.2 | 2 | -0.010±0.274 | -0.165±0.353 |
| R-parahippocampus | 28.0 | -28.4 | -13.7 | L-dorsal lateral prefrontal cortex | -10.2 | 55.7 | 30.2 | 1 | 0.048±0.299 | -0.097±0.254 |
| R-parahippocampus | 28.0 | -28.4 | -13.7 | L-pars Orbitalis | -46.0 | 28.2 | -7.1 | 1 | 0.066±0.308 | -0.080±0.171 |
| R-supra temporal gyrus | 56.5 | -8.5 | -14.3 | L-dorsal lateral prefrontal cortex | -27.3 | 34.1 | 36.4 | 1 | 0.093±0.353 | -0.077±0.500 |
| R-temporal pole | 40.0 | 18.9 | -34.2 | L-dorsal lateral prefrontal cortex | -27.3 | 34.1 | 36.4 | 1 | 0.010±0.254 | -0.119±0.237 |
| R-temporal pole | 52.8 | 10.9 | -21.8 | L-dorsal lateral prefrontal cortex | -27.3 | 34.1 | 36.4 | 1 | 0.037±0.300 | -0.110±0.320 |
| R-ventral posterior cingulate cortex | 5.1 | -38.9 | 27.0 | L-anterior prefrontal cortex | -6.0 | 48.1 | 11.7 | 1 | -0.001±0.311 | -0.161±0.285 |
| *Positive edge set* |  |  |  |  |  |  |  |  |  |  |
| L-pars Orbitalis | -46.0 | 28.2 | -7.1 | L-dorsal anterior cingulate cortex | -6.0 | 34.1 | 26.3 | 110 | 0.014±0.240 | 0.188±0.281 |
| R-orbitofrontal cortex | 13.9 | 56.9 | -16.6 | L-pars Orbitalis | -46.0 | 28.2 | -7.1 | 105 | -0.062±0.279 | 0.136±0.388 |
| R-supra temporal gyrus | 61.9 | -23.8 | -2.8 | L-temporal pole | -34.7 | 18.6 | -32.2 | 81 | -0.029±0.288 | 0.139±0.244 |
| R-cerebellum | 21.2 | -36.4 | 2.6 | L-temporal pole | -34.7 | 18.6 | -32.2 | 16 | -0.020±0.251 | 0.130±0.297 |
| R-visual association cortex | 14.8 | -68.4 | 34.9 | R-parahippocampus | 28.0 | -28.4 | -13.7 | 1 | -0.019±0.252 | 0.110±0.246 |

R, right; L, left; Frequency, number of times that the edge appeared in the LOOCV iterations; ΔrsFC, change in pre- and post-treatment resting state functional connectivity strength; nCPM, network connectome-based predictive modeling; DMN, default mode network; MNI, Montreal Neurological Institute; SD, standard deviation.

**Supplementary Table 8**. Model performance of the nCPM for classifying recurring MDD and stable MDD under different edge selection thresholds

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Networks | CPM performance  (edge selection threshold P = 0.01) | | | | CPM performance  (edge selection threshold P = 0.05) | | | | CPM performance  (edge selection threshold P = 0.1) | | | | |
| accuracy | sensitivitya | specificityb | *P* | accuracy | sensitivity | specificity | *P* | accuracy | sensitivity | specificity | *P* |
| SMN | 44.1 | 0.0 | 75.0 | - | 50.0 | 21.4 | 70.0 | / | 45.6 | 7.1 | 72.5 | / |
| CON | - | - | - | - | 58.8 | 0.0 | 100.0 | / | 51.5 | 7.1 | 82.5 | / |
| AUN | - | - | - | - | 58.8 | 0.0 | 100.0 | / | 58.8 | 0.0 | 100.0 | / |
| DMN | 57.4 | 25.0 | 80.0 | 0.097 | **76.5** | **60.7** | **87.5** | **< 0.001** | **75.0** | **67.9** | **80.0** | **< 0.001** |
| VN | 58.8 | 50.0 | 65.0 | 0.108 | 54.4 | 39.3 | 65.0 | 0.406 | 42.6 | 25.0 | 55.0 | / |
| FPN | 17.6 | 0.0 | 30.0 | - | 51.5 | 17.9 | 75.0 | / | 55.9 | 28.6 | 75.0 | 0.167 |
| SN | - | - | - | - | 55.9 | 21.4 | 80.0 | 0.228 | 51.5 | 21.4 | 72.5 | / |
| SCN | - | - | - | - | 41.2 | 14.2 | 60.0 | / | 35.3 | 10.7 | 52.5 | / |
| VAN | - | - | - | - | - | - | - | - | - | - | - | - |
| DAN | - | - | - | - | 60.3 | 32.1 | 80.0 | 0.146 | 63.2 | 32.1 | 85.0 | 0.188 |
| CBN | 41.2 | 7.1 | 65.0 | / | 41.2 | 14.2 | 60.0 | / | 45.6 | 21.4 | 62.5 | / |
| Whole-brain | 52.9 | 14.3 | 80.0 | / | 57.4 | 28.6 | 77.5 | 0.244 | 51.4 | 17.9 | 75.0 | / |

ΔrsFC, change in pre- and post-treatment resting-state functional connectivity strength; nCPM, network connectome-based predictive modeling; SMN, somatosensory network; CON, cingulo-opercular; AUN, auditory network; DMN, default mode network; VN, visual network; FPN, frontoparietal network; SN, salience network; SCN, subcortical network; VAN, ventral attention network; DAN, dorsal attention network; CBN, cerebellum network; -, no features were selected to fit the SVM model; /, permutation tests were not performed since the LOOCV classification was not significant. Model performance with permutation *P* < 0.0014 is marked in bold.

a Sensitivity (true-positive rate) depicts the proportion of recurring MDD who are correctly identified.

b Specificity (true-negative rate) depicts the proportion of stable MDD who are correctly identified.

**Supplementary Table 9.** Control analyses of DMN nCPM classifying recurring MDD and stable MDD under different edge-selection thresholds

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P threshold for feature selection | CPM performance  (100 iterations of 10-fold cross-validation) | | | CPM performance  (including motion as a covariate) | | | CPM performance  (including medication as a covariate) | | | CPM performance  (using 368 templates) | | | CPM performance  (without GSR) | | |
| accuracy | sensitivitya | specificityb | accuracy | sensitivity | specificity | accuracy | sensitivity | specificity | accuracy | sensitivity | specificity | accuracy | sensitivity | specificity |
| P = 0.01 | 52.2 | 32.5 | 66.0 | 41.2 | 67.9 | 22.5 | 54.4 | 35.7 | 67.5 | 60.3 | 64.3 | 57.5 | 57.4 | 71.4 | 47.5 |
| P = 0.05 | 64.1 | 55.8 | 70.0 | 79.4 | 75.0 | 82.5 | 66.2 | 60.7 | 70.0 | 76.5 | 71.4 | 80.0 | 48.5 | 42.9 | 52.5 |
| P = 0.1 | 70.8 | 60.1 | 78.3 | 70.6 | 60.7 | 77.5 | 75.0 | 64.2 | 82.5 | 73.5 | 85.7 | 65.0 | 54.4 | 46.4 | 60.0 |

nCPM, network connectome-based predictive modeling; GSR, global signal regression.

a Sensitivity (true-positive rate) depicts the proportion of recurring MDD who are correctly identified.

b Specificity (true-negative rate) depicts the proportion of stable MDD who are correctly identified.

**Supplementary Table 10.** Edges appeared in all 68 LOOCVs of the DMN nCPM machine learning pipeline, classifying recurring MDD and stable MDD. The consensus edges forming the recurrence network are marked in **bold**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Node 1 | MNI coordinate  (x, y, z) | | | Node 2 | MNI coordinate  (x, y, z) | | | Frequency | ΔrsFC of stable MDD  (Mean ± SD) | ΔrsFC of recurring MDD  (Mean ± SD) |
| *Negative edge set* |  |  |  |  |  |  |  |  |  |  |
| L-angular gyrus | **-42.1** | **-65.6** | **41.7** | **L-angular gyrus** | **-51.4** | **-56.3** | **20.5** | **68** | **0.088±0.279** | **-0.044±0.212** |
| L-angular gyrus | **-51.4** | **-56.3** | **20.5** | **L-ventral posterior cingulate cortex** | **-6.5** | **-53.9** | **37.4** | **68** | **0.027±0.358** | **-0.137±0.328** |
| L-anterior prefrontal cortex | **-11.7** | **65.1** | **4.2** | **L-frontal eye field** | **-11.2** | **34.3** | **51.5** | **68** | **0.154±0.333** | **-0.035±0.330** |
| L-anterior prefrontal cortex | **-11.7** | **65.1** | **4.2** | **L-angular gyrus** | **-51.4** | **-56.3** | **20.5** | **68** | **0.059±0.276** | **-0.097±0.317** |
| L-anterior prefrontal cortex | **-6.9** | **48.3** | **-5.7** | **L-temporal pole** | **-49.5** | **11.1** | **-30.6** | **68** | **0.083±0.372** | **-0.067±0.311** |
| L-anterior prefrontal cortex | **-6.9** | **48.3** | **-5.7** | **L-supra temporal gyrus** | **-57.1** | **14.5** | **-6.8** | **68** | **0.144±0.329** | **-0.081±0.317** |
| L-dorsal lateral prefrontal cortex | **-10.2** | **55.7** | **30.2** | **L-frontal eye field** | **-11.2** | **34.3** | **51.5** | **68** | **0.067±0.310** | **-0.056±0.319** |
| L-dorsal lateral prefrontal cortex | **-27.3** | **34.1** | **36.4** | **L-frontal eye field** | **-11.2** | **34.3** | **51.5** | **68** | **0.156±0.231** | **-0.010±0.233** |
| L-dorsal lateral prefrontal cortex | **-10.2** | **55.7** | **30.2** | **L-ventral posterior cingulate cortex** | **-6.5** | **-53.9** | **37.4** | **68** | **0.084±0.245** | **-0.091±0.298** |
| L-frontal eye field | **-11.2** | **34.3** | **51.5** | **L-angular gyrus** | **-51.4** | **-56.3** | **20.5** | **68** | **0.070±0.303** | **-0.071±0.250** |
| L-frontal eye field | **-11.2** | **34.3** | **51.5** | **L-ventral posterior cingulate cortex** | **-6.5** | **-53.9** | **37.4** | **68** | **0.109±0.271** | **-0.014±0.224** |
| L-inferior temporal gyrus | **-57.6** | **-6.4** | **-22.7** | **L-supra temporal gyrus** | **-57.1** | **14.5** | **-6.8** | **68** | **0.031±0.279** | **-0.174±0.308** |
| L-middle temporal gyrus | **-49.7** | **6.4** | **-15.2** | **L-inferior temporal gyrus** | **-57.6** | **-6.4** | **-22.7** | **68** | **0.038±0.239** | **-0.066±0.346** |
| L-supra temporal gyrus | **-57.1** | **14.5** | **-6.8** | **L-visual association cortex** | **-41.3** | **-75.4** | **22.8** | **68** | **0.109±0.258** | **-0.082±0.267** |
| L-supra temporal gyrus | **-57.1** | **14.5** | **-6.8** | **L-ventral posterior cingulate cortex** | **-8.6** | **-58.8** | **17.6** | **68** | **0.052±0.353** | **-0.110±0.325** |
| L-supra temporal gyrus | **-57.1** | **14.5** | **-6.8** | **L-ventral posterior cingulate cortex** | **-6.5** | **-53.9** | **37.4** | **68** | **0.058±0.325** | **-0.121±0.305** |
| L-temporal pole | **-38.0** | **6.1** | **-37.9** | **L-temporal pole** | **-34.7** | **18.6** | **-32.2** | **68** | **0.077±0.413** | **-0.151±0.404** |
| L-temporal pole | **-38.0** | **6.1** | **-37.9** | **L-temporal pole** | **-49.5** | **11.1** | **-30.6** | **68** | **0.091±0.393** | **-0.125±0.291** |
| L-temporal pole | **-34.7** | **18.6** | **-32.2** | **L-temporal pole** | **-49.5** | **11.1** | **-30.6** | **68** | **0.203±0.424** | **-0.032±0.319** |
| L-temporal pole | **-49.5** | **11.1** | **-30.6** | **L-middle temporal gyrus** | **-49.7** | **6.4** | **-15.2** | **68** | **0.089±0.384** | **-0.092±0.328** |
| L-temporal pole | **-34.7** | **18.6** | **-32.2** | **L-fusiform** | **-26.7** | **-42.7** | **-16.1** | **68** | **0.115±0.283** | **-0.028±0.244** |
| L-temporal pole | **-38.0** | **6.1** | **-37.9** | **L-ventral posterior cingulate cortex** | **-8.6** | **-58.8** | **17.6** | **68** | **0.085±0.263** | **-0.058±0.274** |
| L-temporal pole | **-38.0** | **6.1** | **-37.9** | **L-ventral posterior cingulate cortex** | **-6.5** | **-53.9** | **37.4** | **68** | **0.042±0.247** | **-0.108±0.302** |
| L-visual association cortex | **-41.3** | **-75.4** | **22.8** | **L-retrolimbic area** | **-7.5** | **-42.1** | **13.3** | **68** | **0.092±0.261** | **-0.080±0.309** |
| L-visual association cortex | **-41.3** | **-75.4** | **22.8** | **L-parahippocampus** | **-20.7** | **-30.8** | **-11.1** | **68** | **0.064±0.260** | **-0.067±0.240** |
| R-angular gyrus | **47.8** | **-61.9** | **34.7** | **R-temporal pole** | **40.0** | **18.9** | **-34.2** | **68** | **0.062±0.304** | **-0.137±0.350** |
| R-angular gyrus | **41.4** | **-75.3** | **28.0** | **R-temporal pole** | **40.0** | **18.9** | **-34.2** | **68** | **0.104±0.293** | **-0.075±0.310** |
| R-angular gyrus | **47.8** | **-61.9** | **34.7** | **R-temporal pole** | **52.8** | **10.9** | **-21.8** | **68** | **0.051±0.283** | **-0.108±0.307** |
| R-angular gyrus | **41.4** | **-75.3** | **28.0** | **R-temporal pole** | **52.8** | **10.9** | **-21.8** | **68** | **0.158±0.314** | **-0.010±0.268** |
| R-angular gyrus | **47.8** | **-61.9** | **34.7** | **L-orbitofrontal cortex** | **-5.4** | **29.1** | **-10.1** | **68** | **0.068±0.229** | **-0.072±0.276** |
| R-angular gyrus | **41.4** | **-75.3** | **28.0** | **L-orbitofrontal cortex** | **-5.4** | **29.1** | **-10.1** | **68** | **0.140±0.273** | **-0.044±0.267** |
| R-angular gyrus | **41.4** | **-75.3** | **28.0** | **L-anterior prefrontal cortex** | **-6.0** | **48.1** | **11.7** | **68** | **0.095±0.282** | **-0.086±0.307** |
| R-angular gyrus | **41.4** | **-75.3** | **28.0** | **L-dorsal lateral prefrontal cortex** | **-10.2** | **55.7** | **30.2** | **68** | **0.054±0.260** | **-0.078±0.302** |
| R-angular gyrus | **47.8** | **-61.9** | **34.7** | **L-frontal eye field** | **-11.2** | **34.3** | **51.5** | **68** | **0.072±0.265** | **-0.083±0.299** |
| R-angular gyrus | **41.4** | **-75.3** | **28.0** | **L-frontal eye field** | **-11.2** | **34.3** | **51.5** | **68** | **0.121±0.284** | **-0.091±0.273** |
| R-angular gyrus | **41.4** | **-75.3** | **28.0** | **L-angular gyrus** | **-51.4** | **-56.3** | **20.5** | **68** | **0.051±0.276** | **-0.073±0.357** |
| R-angular gyrus | **47.8** | **-61.9** | **34.7** | **L-temporal pole** | **-38.0** | **6.1** | **-37.9** | **68** | **0.076±0.214** | **-0.085±0.285** |
| R-angular gyrus | **41.4** | **-75.3** | **28.0** | **L-temporal pole** | **-38.0** | **6.1** | **-37.9** | **68** | **0.070±0.256** | **-0.093±0.259** |
| R-angular gyrus | **41.4** | **-75.3** | **28.0** | **L-temporal pole** | **-34.7** | **18.6** | **-32.2** | **68** | **0.101±0.332** | **-0.049±0.296** |
| R-anterior prefrontal cortex | **14.6** | **64.7** | **3.6** | **R-dorsal lateral prefrontal cortex** | **8.4** | **53.3** | **23.9** | **68** | **0.164±0.347** | **-0.024±0.349** |
| R-anterior prefrontal cortex | **14.6** | **64.7** | **3.6** | **R-temporal pole** | **40.0** | **18.9** | **-34.2** | **68** | **0.148±0.385** | **-0.090±0.407** |
| R-anterior prefrontal cortex | **14.6** | **64.7** | **3.6** | **R-temporal pole** | **52.8** | **10.9** | **-21.8** | **68** | **0.087±0.366** | **-0.089±0.280** |
| R-anterior prefrontal cortex | **14.6** | **64.7** | **3.6** | **R-supra temporal gyrus** | **56.5** | **-8.5** | **-14.3** | **68** | **0.061±0.352** | **-0.125±0.311** |
| R-anterior prefrontal cortex | **14.6** | **64.7** | **3.6** | **R-cerebellum** | **21.2** | **-36.4** | **2.6** | **68** | **0.063±0.288** | **-0.059±0.222** |
| R-anterior prefrontal cortex | **14.6** | **64.7** | **3.6** | **L-anterior prefrontal cortex** | **-6.0** | **48.1** | **11.7** | **68** | **0.148±0.437** | **-0.019±0.296** |
| R-anterior prefrontal cortex | **14.6** | **64.7** | **3.6** | **L-dorsal lateral prefrontal cortex** | **-10.2** | **55.7** | **30.2** | **68** | **0.076±0.317** | **-0.095±0.403** |
| R-anterior prefrontal cortex | **8.2** | **45.9** | **-1.7** | **L-frontal eye field** | **-11.2** | **34.3** | **51.5** | **68** | **0.179±0.274** | **0.016±0.255** |
| R-anterior prefrontal cortex | **14.6** | **64.7** | **3.6** | **L-frontal eye field** | **-11.2** | **34.3** | **51.5** | **68** | **0.123±0.256** | **-0.063±0.283** |
| R-anterior prefrontal cortex | **14.6** | **64.7** | **3.6** | **L-angular gyrus** | **-51.4** | **-56.3** | **20.5** | **68** | **0.031±0.263** | **-0.127±0.252** |
| R-anterior prefrontal cortex | **14.6** | **64.7** | **3.6** | **L-middle temporal gyrus** | **-49.7** | **6.4** | **-15.2** | **68** | **0.052±0.258** | **-0.115±0.236** |
| R-anterior prefrontal cortex | **8.2** | **45.9** | **-1.7** | **L-supra temporal gyrus** | **-57.1** | **14.5** | **-6.8** | **68** | **0.128±0.271** | **-0.033±0.348** |
| R-anterior prefrontal cortex | **14.6** | **64.7** | **3.6** | **L-supra temporal gyrus** | **-57.1** | **14.5** | **-6.8** | **68** | **0.024±0.323** | **-0.113±0.225** |
| R-anterior prefrontal cortex | **8.2** | **45.9** | **-1.7** | **L-dorsal anterior cingulate cortex** | **-6.0** | **34.1** | **26.3** | **68** | **-0.002±0.245** | **-0.101±0.197** |
| R-anterior prefrontal cortex | **14.6** | **64.7** | **3.6** | **L-hippocampus** | **-32.1** | **-40.2** | **-4.0** | **68** | **0.008±0.249** | **-0.148±0.294** |
| R-anterior prefrontal cortex | **14.6** | **64.7** | **3.6** | **L-parahippocampus** | **-20.7** | **-30.8** | **-11.1** | **68** | **0.053±0.272** | **-0.089±0.228** |
| R-dorsal lateral prefrontal cortex | **8.4** | **53.3** | **23.9** | **R-angular gyrus** | **41.4** | **-75.3** | **28.0** | **68** | **0.109±0.292** | **-0.056±0.265** |
| R-dorsal lateral prefrontal cortex | **8.4** | **53.3** | **23.9** | **R-temporal pole** | **40.0** | **18.9** | **-34.2** | **68** | **0.080±0.302** | **-0.111±0.255** |
| R-dorsal lateral prefrontal cortex | **8.4** | **53.3** | **23.9** | **R-ventral posterior cingulate cortex** | **12.3** | **-57.2** | **18.1** | **68** | **0.148±0.378** | **-0.009±0.311** |
| R-dorsal lateral prefrontal cortex | **8.4** | **53.3** | **23.9** | **R-dorsal posterior cingulate cortex** | **6.2** | **-57.4** | **38.2** | **68** | **0.075±0.296** | **-0.104±0.294** |
| R-dorsal lateral prefrontal cortex | **8.4** | **53.3** | **23.9** | **L-dorsal lateral prefrontal cortex** | **-10.2** | **55.7** | **30.2** | **68** | **0.043±0.238** | **-0.072±0.218** |
| R-dorsal lateral prefrontal cortex | **8.4** | **53.3** | **23.9** | **L-frontal eye field** | **-11.2** | **34.3** | **51.5** | **68** | **0.153±0.270** | **-0.049±0.219** |
| R-dorsal lateral prefrontal cortex | **8.4** | **53.3** | **23.9** | **L-ventral posterior cingulate cortex** | **-8.6** | **-58.8** | **17.6** | **68** | **0.179±0.390** | **0.033±0.223** |
| R-dorsal lateral prefrontal cortex | **8.4** | **53.3** | **23.9** | **L-ventral posterior cingulate cortex** | **-6.5** | **-53.9** | **37.4** | **68** | **0.057±0.308** | **-0.102±0.263** |
| R-dorsal posterior cingulate cortex | **6.2** | **-57.4** | **38.2** | **L-anterior prefrontal cortex** | **-6.0** | **48.1** | **11.7** | **68** | **0.043±0.276** | **-0.113±0.295** |
| R-dorsal posterior cingulate cortex | **6.2** | **-57.4** | **38.2** | **L-dorsal lateral prefrontal cortex** | **-10.2** | **55.7** | **30.2** | **68** | **0.050±0.242** | **-0.146±0.300** |
| R-dorsal posterior cingulate cortex | **6.2** | **-57.4** | **38.2** | **L-frontal eye field** | **-11.2** | **34.3** | **51.5** | **68** | **0.107±0.252** | **-0.087±0.259** |
| R-dorsal posterior cingulate cortex | **6.2** | **-57.4** | **38.2** | **L-frontal eye field** | **-39.4** | **17.2** | **46.7** | **68** | **0.010±0.307** | **-0.128±0.258** |
| R-dorsal posterior cingulate cortex | **6.2** | **-57.4** | **38.2** | **L-inferior temporal gyrus** | **-57.6** | **-6.4** | **-22.7** | **68** | **0.075±0.237** | **-0.075±0.240** |
| R-dorsal posterior cingulate cortex | **6.2** | **-57.4** | **38.2** | **L-parahippocampus** | **-20.7** | **-30.8** | **-11.1** | **68** | **0.033±0.178** | **-0.079±0.242** |
| R-frontal eye field | **14.3** | **36.9** | **48.9** | **R-angular gyrus** | **47.8** | **-61.9** | **34.7** | **68** | **0.044±0.310** | **-0.105±0.272** |
| R-frontal eye field | **14.3** | **36.9** | **48.9** | **R-angular gyrus** | **41.4** | **-75.3** | **28.0** | **68** | **0.087±0.308** | **-0.076±0.241** |
| R-frontal eye field | **23.9** | **30.7** | **36.4** | **R-cerebellum** | **32.2** | **-78.5** | **-40.4** | **68** | **0.095±0.264** | **-0.031±0.309** |
| R-frontal eye field | **14.3** | **36.9** | **48.9** | **L-frontal eye field** | **-11.2** | **34.3** | **51.5** | **68** | **0.036±0.305** | **-0.141±0.326** |
| R-frontal eye field | **23.9** | **30.7** | **36.4** | **L-frontal eye field** | **-11.2** | **34.3** | **51.5** | **68** | **0.199±0.234** | **-0.005±0.292** |
| R-frontal eye field | **14.3** | **36.9** | **48.9** | **L-ventral posterior cingulate cortex** | **-8.6** | **-58.8** | **17.6** | **68** | **0.133±0.378** | **0.000±0.277** |
| R-frontal eye field | **14.3** | **36.9** | **48.9** | **L-retrolimbic area** | **-7.5** | **-42.1** | **13.3** | **68** | **0.132±0.320** | **-0.037±0.318** |
| R-frontal eye field | **23.9** | **30.7** | **36.4** | **L-retrolimbic area** | **-7.5** | **-42.1** | **13.3** | **68** | **0.108±0.298** | **-0.026±0.308** |
| R-hippocampus | **28.8** | **-36.9** | **0.0** | **L-angular gyrus** | **-42.1** | **-65.6** | **41.7** | **68** | **0.052±0.216** | **-0.087±0.191** |
| R-hippocampus | **28.8** | **-36.9** | **0.0** | **L-middle temporal gyrus** | **-49.7** | **6.4** | **-15.2** | **68** | **0.087±0.216** | **-0.078±0.245** |
| R-hippocampus | **28.8** | **-36.9** | **0.0** | **L-supra temporal gyrus** | **-57.1** | **14.5** | **-6.8** | **68** | **0.102±0.245** | **-0.122±0.283** |
| R-orbitofrontal cortex | **13.9** | **56.9** | **-16.6** | **L-frontal eye field** | **-11.2** | **34.3** | **51.5** | **68** | **0.181±0.286** | **-0.004±0.271** |
| R-parahippocampus | **28.0** | **-28.4** | **-13.7** | **L-middle temporal gyrus** | **-49.7** | **6.4** | **-15.2** | **68** | **0.050±0.331** | **-0.147±0.358** |
| R-parahippocampus | **28.0** | **-28.4** | **-13.7** | **L-inferior temporal gyrus** | **-59.0** | **-30.0** | **3.5** | **68** | **0.065±0.227** | **-0.075±0.320** |
| R-parahippocampus | **28.0** | **-28.4** | **-13.7** | **L-supra temporal gyrus** | **-57.1** | **14.5** | **-6.8** | **68** | **0.137±0.310** | **-0.089±0.314** |
| R-parahippocampus | **28.0** | **-28.4** | **-13.7** | **L-parahippocampus** | **-20.7** | **-30.8** | **-11.1** | **68** | **0.157±0.256** | **-0.126±0.561** |
| R-supra temporal gyrus | **56.5** | **-8.5** | **-14.3** | **R-ventral posterior cingulate cortex** | **12.3** | **-57.2** | **18.1** | **68** | **0.118±0.332** | **-0.111±0.247** |
| R-supra temporal gyrus | **56.5** | **-8.5** | **-14.3** | **R-hippocampus** | **28.8** | **-36.9** | **0.0** | **68** | **0.094±0.271** | **-0.091±0.241** |
| R-supra temporal gyrus | **56.5** | **-8.5** | **-14.3** | **L-ventral posterior cingulate cortex** | **-8.6** | **-58.8** | **17.6** | **68** | **0.097±0.304** | **-0.084±0.225** |
| R-supra temporal gyrus | **56.5** | **-8.5** | **-14.3** | **L-ventral posterior cingulate cortex** | **-6.5** | **-53.9** | **37.4** | **68** | **0.084±0.337** | **-0.081±0.273** |
| R-temporal pole | **40.0** | **18.9** | **-34.2** | **R-ventral posterior cingulate cortex** | **5.1** | **-38.9** | **27.0** | **68** | **0.001±0.279** | **-0.138±0.294** |
| R-temporal pole | **52.8** | **10.9** | **-21.8** | **R-ventral posterior cingulate cortex** | **5.1** | **-38.9** | **27.0** | **68** | **0.087±0.325** | **-0.084±0.325** |
| R-temporal pole | **40.0** | **18.9** | **-34.2** | **R-ventral posterior cingulate cortex** | **12.3** | **-57.2** | **18.1** | **68** | **0.090±0.320** | **-0.114±0.281** |
| R-temporal pole | **52.8** | **10.9** | **-21.8** | **R-ventral posterior cingulate cortex** | **12.3** | **-57.2** | **18.1** | **68** | **0.110±0.294** | **-0.122±0.289** |
| R-temporal pole | **52.8** | **10.9** | **-21.8** | **R-hippocampus** | **28.8** | **-36.9** | **0.0** | **68** | **0.062±0.261** | **-0.084±0.274** |
| R-temporal pole | **52.8** | **10.9** | **-21.8** | **R-parahippocampus** | **28.0** | **-28.4** | **-13.7** | **68** | **0.046±0.321** | **-0.124±0.425** |
| R-temporal pole | **40.0** | **18.9** | **-34.2** | **R-cerebellum** | **21.2** | **-36.4** | **2.6** | **68** | **0.041±0.293** | **-0.068±0.192** |
| R-temporal pole | **40.0** | **18.9** | **-34.2** | **L-frontal eye field** | **-11.2** | **34.3** | **51.5** | **68** | **0.045±0.248** | **-0.075±0.335** |
| R-temporal pole | **52.8** | **10.9** | **-21.8** | **L-inferior temporal gyrus** | **-57.6** | **-6.4** | **-22.7** | **68** | **0.141±0.309** | **-0.034±0.345** |
| R-temporal pole | **40.0** | **18.9** | **-34.2** | **L-supra temporal gyrus** | **-57.1** | **14.5** | **-6.8** | **68** | **0.162±0.420** | **-0.084±0.326** |
| R-temporal pole | **40.0** | **18.9** | **-34.2** | **L-ventral posterior cingulate cortex** | **-8.6** | **-58.8** | **17.6** | **68** | **0.065±0.286** | **-0.124±0.281** |
| R-temporal pole | **52.8** | **10.9** | **-21.8** | **L-ventral posterior cingulate cortex** | **-8.6** | **-58.8** | **17.6** | **68** | **0.082±0.320** | **-0.106±0.311** |
| R-temporal pole | **52.8** | **10.9** | **-21.8** | **L-hippocampus** | **-32.1** | **-40.2** | **-4.0** | **68** | **0.047±0.319** | **-0.139±0.319** |
| R-ventral posterior cingulate cortex | **5.1** | **-38.9** | **27.0** | **L-frontal eye field** | **-11.2** | **34.3** | **51.5** | **68** | **0.160±0.335** | **-0.035±0.342** |
| R-ventral posterior cingulate cortex | **5.1** | **-38.9** | **27.0** | **L-angular gyrus** | **-51.4** | **-56.3** | **20.5** | **68** | **0.088±0.329** | **-0.115±0.322** |
| R-ventral posterior cingulate cortex | **5.1** | **-38.9** | **27.0** | **L-temporal pole** | **-38.0** | **6.1** | **-37.9** | **68** | **0.041±0.235** | **-0.121±0.281** |
| R-ventral posterior cingulate cortex | **12.3** | **-57.2** | **18.1** | **L-temporal pole** | **-38.0** | **6.1** | **-37.9** | **68** | **0.124±0.268** | **-0.090±0.243** |
| R-ventral posterior cingulate cortex | **5.1** | **-38.9** | **27.0** | **L-inferior temporal gyrus** | **-57.6** | **-6.4** | **-22.7** | **68** | **0.130±0.253** | **-0.049±0.258** |
| R-ventral posterior cingulate cortex | **12.3** | **-57.2** | **18.1** | **L-inferior temporal gyrus** | **-57.6** | **-6.4** | **-22.7** | **68** | **0.142±0.280** | **-0.010±0.282** |
| R-ventral posterior cingulate cortex | **12.3** | **-57.2** | **18.1** | **L-supra temporal gyrus** | **-57.1** | **14.5** | **-6.8** | **68** | **0.095±0.317** | **-0.117±0.350** |
| R-ventral posterior cingulate cortex | **5.1** | **-38.9** | **27.0** | **L-visual association cortex** | **-41.3** | **-75.4** | **22.8** | **68** | **0.064±0.289** | **-0.124±0.330** |
| R-ventral posterior cingulate cortex | **5.1** | **-38.9** | **27.0** | **L-ventral posterior cingulate cortex** | **-8.6** | **-58.8** | **17.6** | **68** | **0.080±0.243** | **-0.108±0.345** |
| R-ventral posterior cingulate cortex | **5.1** | **-38.9** | **27.0** | **L-parahippocampus** | **-20.7** | **-30.8** | **-11.1** | **68** | **0.053±0.236** | **-0.058±0.247** |
| R-ventral posterior cingulate cortex | **12.3** | **-57.2** | **18.1** | **L-parahippocampus** | **-20.7** | **-30.8** | **-11.1** | **68** | **0.065±0.237** | **-0.087±0.231** |
| R-visual association cortex | **14.8** | **-68.4** | **34.9** | **L-anterior prefrontal cortex** | **-6.0** | **48.1** | **11.7** | **68** | **0.052±0.239** | **-0.114±0.303** |
| R-visual association cortex | **14.8** | **-68.4** | **34.9** | **L-dorsal lateral prefrontal cortex** | **-10.2** | **55.7** | **30.2** | **68** | **0.093±0.265** | **-0.057±0.315** |
| R-visual association cortex | **14.8** | **-68.4** | **34.9** | **L-frontal eye field** | **-11.2** | **34.3** | **51.5** | **68** | **0.126±0.268** | **-0.013±0.266** |
| R-ventral posterior cingulate cortex | 5.1 | -38.9 | 27.0 | L-retrolimbic area | -7.5 | -42.1 | 13.3 | 67 | 0.041±0.265 | -0.095±0.262 |
| R-frontal eye field | 14.3 | 36.9 | 48.9 | R-ventral posterior cingulate cortex | 5.1 | -38.9 | 27.0 | 66 | 0.106±0.344 | -0.033±0.249 |
| R-dorsal lateral prefrontal cortex | 8.4 | 53.3 | 23.9 | L-retrolimbic area | -7.5 | -42.1 | 13.3 | 66 | 0.077±0.355 | -0.090±0.338 |
| R-supra temporal gyrus | 56.5 | -8.5 | -14.3 | R-dorsal posterior cingulate cortex | 6.2 | -57.4 | 38.2 | 65 | 0.074±0.331 | -0.078±0.294 |
| R-ventral posterior cingulate cortex | 12.3 | -57.2 | 18.1 | L-ventral posterior cingulate cortex | -6.5 | -53.9 | 37.4 | 65 | 0.068±0.279 | -0.044±0.357 |
| L-anterior prefrontal cortex | -11.7 | 65.1 | 4.2 | L-hippocampus | -21.5 | -36.9 | 5.8 | 65 | 0.043±0.229 | -0.078±0.271 |
| L-ventral posterior cingulate cortex | -8.6 | -58.8 | 17.6 | L-parahippocampus | -20.7 | -30.8 | -11.1 | 65 | 0.048±0.245 | -0.057±0.238 |
| R-temporal pole | 40.0 | 18.9 | -34.2 | R-parahippocampus | 28.0 | -28.4 | -13.7 | 64 | 0.141±0.355 | -0.045±0.331 |
| R-temporal pole | 52.8 | 10.9 | -21.8 | L-anterior prefrontal cortex | -6.9 | 48.3 | -5.7 | 64 | 0.029±0.361 | -0.092±0.328 |
| R-cerebellum | 21.2 | -36.4 | 2.6 | L-anterior prefrontal cortex | -11.7 | 65.1 | 4.2 | 64 | 0.050±0.260 | -0.031±0.232 |
| R-dorsal lateral prefrontal cortex | 8.4 | 53.3 | 23.9 | L-visual association cortex | -41.3 | -75.4 | 22.8 | 64 | 0.096±0.279 | -0.031±0.235 |
| R-temporal pole | 40.0 | 18.9 | -34.2 | L-ventral posterior cingulate cortex | -6.5 | -53.9 | 37.4 | 62 | -0.033±0.220 | -0.144±0.273 |
| R-visual association cortex | 14.8 | -68.4 | 34.9 | L-dorsal anterior cingulate cortex | -6.0 | 34.1 | 26.3 | 58 | -0.012±0.253 | -0.102±0.317 |
| R-frontal eye field | 14.3 | 36.9 | 48.9 | R-temporal pole | 40.0 | 18.9 | -34.2 | 57 | 0.047±0.330 | -0.094±0.307 |
| R-temporal pole | 40.0 | 18.9 | -34.2 | R-supra temporal gyrus | 56.5 | -8.5 | -14.3 | 57 | 0.190±0.395 | -0.021±0.433 |
| R-dorsal lateral prefrontal cortex | 8.4 | 53.3 | 23.9 | R-cerebellum | 32.2 | -78.5 | -40.4 | 56 | 0.076±0.264 | -0.014±0.291 |
| R-dorsal posterior cingulate cortex | 6.2 | -57.4 | 38.2 | L-temporal pole | -38.0 | 6.1 | -37.9 | 55 | -0.006±0.237 | -0.120±0.287 |
| R-dorsal lateral prefrontal cortex | 8.4 | 53.3 | 23.9 | L-parahippocampus | -20.7 | -30.8 | -11.1 | 55 | 0.089±0.241 | -0.021±0.228 |
| L-frontal eye field | -11.2 | 34.3 | 51.5 | L-visual association cortex | -41.3 | -75.4 | 22.8 | 51 | 0.070±0.278 | -0.047±0.282 |
| R-angular gyrus | 41.4 | -75.3 | 28.0 | L-ventral posterior cingulate cortex | -8.6 | -58.8 | 17.6 | 50 | 0.082±0.288 | -0.039±0.274 |
| R-temporal pole | 40.0 | 18.9 | -34.2 | L-dorsal lateral prefrontal cortex | -10.2 | 55.7 | 30.2 | 49 | 0.049±0.304 | -0.100±0.314 |
| R-parahippocampus | 28.0 | -28.4 | -13.7 | L-temporal pole | -34.7 | 18.6 | -32.2 | 48 | 0.111±0.359 | -0.020±0.437 |
| R-dorsal lateral prefrontal cortex | 8.4 | 53.3 | 23.9 | L-supra temporal gyrus | -57.1 | 14.5 | -6.8 | 44 | 0.061±0.286 | -0.073±0.348 |
| L-middle temporal gyrus | -49.7 | 6.4 | -15.2 | L-hippocampus | -32.1 | -40.2 | -4.0 | 42 | 0.093±0.311 | -0.075±0.347 |
| L-angular gyrus | -51.4 | -56.3 | 20.5 | L-visual association cortex | -41.3 | -75.4 | 22.8 | 41 | 0.074±0.292 | -0.053±0.309 |
| R-angular gyrus | 47.8 | -61.9 | 34.7 | L-supra temporal gyrus | -57.1 | 14.5 | -6.8 | 37 | 0.022±0.292 | -0.131±0.311 |
| R-frontal eye field | 14.3 | 36.9 | 48.9 | R-dorsal posterior cingulate cortex | 6.2 | -57.4 | 38.2 | 35 | 0.108±0.297 | -0.005±0.279 |
| L-anterior prefrontal cortex | 18.2 | 57.0 | -14.3 | L-frontal eye field | -11.2 | 34.3 | 51.5 | 35 | 0.103±0.314 | -0.014±0.228 |
| L-anterior prefrontal cortex | 18.2 | 57.0 | -14.3 | L-frontal eye field | -39.4 | 17.2 | 46.7 | 34 | 0.020±0.259 | -0.085±0.229 |
| L-frontal eye field | -11.2 | 34.3 | 51.5 | L-retrolimbic area | -7.5 | -42.1 | 13.3 | 34 | 0.129±0.292 | -0.004±0.390 |
| L-temporal pole | -34.7 | 18.6 | -32.2 | L-hippocampus | -21.5 | -36.9 | 5.8 | 34 | 0.040±0.331 | -0.074±0.272 |
| R-angular gyrus | 47.8 | -61.9 | 34.7 | R-cerebellum | 32.2 | -78.5 | -40.4 | 33 | 0.037±0.307 | -0.078±0.271 |
| L-anterior prefrontal cortex | -11.7 | 65.1 | 4.2 | L-middle temporal gyrus | -49.7 | 6.4 | -15.2 | 32 | 0.024±0.230 | -0.086±0.233 |
| R-dorsal lateral prefrontal cortex | 8.4 | 53.3 | 23.9 | R-ventral posterior cingulate cortex | 5.1 | -38.9 | 27.0 | 30 | 0.138±0.330 | 0.017±0.286 |
| R-cerebellum | 21.2 | -36.4 | 2.6 | L-dorsal anterior cingulate cortex | -6.0 | 34.1 | 26.3 | 30 | 0.086±0.296 | -0.023±0.266 |
| R-temporal pole | 40.0 | 18.9 | -34.2 | R-dorsal posterior cingulate cortex | 6.2 | -57.4 | 38.2 | 29 | -0.019±0.237 | -0.120±0.253 |
| R-ventral posterior cingulate cortex | 5.1 | -38.9 | 27.0 | L-temporal pole | -34.7 | 18.6 | -32.2 | 29 | 0.050±0.296 | -0.035±0.288 |
| R-dorsal posterior cingulate cortex | 6.2 | -57.4 | 38.2 | L-angular gyrus | -51.4 | -56.3 | 20.5 | 28 | -0.007±0.284 | -0.145±0.308 |
| R-supra temporal gyrus | 56.5 | -8.5 | -14.3 | R-parahippocampus | 28.0 | -28.4 | -13.7 | 26 | 0.017±0.369 | -0.108±0.297 |
| R-frontal eye field | 23.9 | 30.7 | 36.4 | L-dorsal lateral prefrontal cortex | -10.2 | 55.7 | 30.2 | 26 | 0.081±0.240 | 0.000±0.259 |
| R-hippocampus | 28.8 | -36.9 | 0.0 | L-visual association cortex | -41.3 | -75.4 | 22.8 | 26 | 0.087±0.217 | -0.018±0.252 |
| L-frontal eye field | -39.4 | 17.2 | 46.7 | L-hippocampus | -21.5 | -36.9 | 5.8 | 26 | 0.007±0.276 | -0.092±0.230 |
| R-ventral posterior cingulate cortex | 12.3 | -57.2 | 18.1 | L-middle temporal gyrus | -49.7 | 6.4 | -15.2 | 25 | 0.022±0.241 | -0.083±0.293 |
| L-supra temporal gyrus | -57.1 | 14.5 | -6.8 | L-fusiform | -26.7 | -42.7 | -16.1 | 24 | 0.083±0.281 | -0.071±0.344 |
| R-frontal eye field | 14.3 | 36.9 | 48.9 | R-cerebellum | 32.2 | -78.5 | -40.4 | 23 | 0.103±0.241 | -0.007±0.345 |
| R-angular gyrus | 47.8 | -61.9 | 34.7 | L-temporal pole | -49.5 | 11.1 | -30.6 | 23 | 0.029±0.307 | -0.084±0.337 |
| R-angular gyrus | 41.4 | -75.3 | 28.0 | L-retrolimbic area | -7.5 | -42.1 | 13.3 | 23 | 0.073±0.298 | -0.016±0.274 |
| R-anterior prefrontal cortex | 8.2 | 45.9 | -1.7 | R-dorsal lateral prefrontal cortex | 8.4 | 53.3 | 23.9 | 22 | 0.100±0.289 | -0.010±0.299 |
| R-angular gyrus | 41.4 | -75.3 | 28.0 | R-parahippocampus | 28.0 | -28.4 | -13.7 | 22 | 0.060±0.262 | -0.025±0.243 |
| R-anterior prefrontal cortex | 14.6 | 64.7 | 3.6 | L-temporal pole | -38.0 | 6.1 | -37.9 | 21 | 0.144±0.389 | -0.042±0.413 |
| L-inferior temporal gyrus | -57.6 | -6.4 | -22.7 | L-retrolimbic area | -7.5 | -42.1 | 13.3 | 21 | 0.115±0.225 | 0.010±0.276 |
| L-ventral posterior cingulate cortex | -6.5 | -53.9 | 37.4 | L-retrolimbic area | -7.5 | -42.1 | 13.3 | 21 | 0.037±0.270 | -0.061±0.224 |
| R-ventral posterior cingulate cortex | 12.3 | -57.2 | 18.1 | L-dorsal lateral prefrontal cortex | -10.2 | 55.7 | 30.2 | 20 | 0.097±0.348 | -0.037±0.246 |
| R-supra temporal gyrus | 61.9 | -23.8 | -2.8 | L-inferior temporal gyrus | -57.6 | -6.4 | -22.7 | 20 | -0.021±0.277 | -0.098±0.233 |
| R-visual association cortex | 14.8 | -68.4 | 34.9 | R-temporal pole | 52.8 | 10.9 | -21.8 | 19 | 0.048±0.262 | -0.041±0.218 |
| R-hippocampus | 28.8 | -36.9 | 0.0 | L-inferior temporal gyrus | -59.0 | -30.0 | 3.5 | 19 | 0.061±0.206 | -0.030±0.338 |
| R-temporal pole | 52.8 | 10.9 | -21.8 | L-fusiform | -26.7 | -42.7 | -16.1 | 19 | 0.085±0.322 | -0.064±0.307 |
| L-anterior prefrontal cortex | -6.9 | 48.3 | -5.7 | L-visual association cortex | -41.3 | -75.4 | 22.8 | 19 | 0.104±0.360 | -0.010±0.294 |
| L-anterior prefrontal cortex | -6.9 | 48.3 | -5.7 | L-frontal eye field | -11.2 | 34.3 | 51.5 | 18 | 0.156±0.327 | 0.017±0.291 |
| L-temporal pole | -49.5 | 11.1 | -30.6 | L-hippocampus | -21.5 | -36.9 | 5.8 | 18 | 0.115±0.290 | 0.007±0.254 |
| R-dorsal posterior cingulate cortex | 6.2 | -57.4 | 38.2 | R-cerebellum | 32.2 | -78.5 | -40.4 | 17 | 0.015±0.288 | -0.089±0.180 |
| R-anterior prefrontal cortex | 8.2 | 45.9 | -1.7 | L-dorsal lateral prefrontal cortex | -10.2 | 55.7 | 30.2 | 17 | 0.140±0.327 | 0.009±0.328 |
| L-anterior prefrontal cortex | -6.9 | 48.3 | -5.7 | L-middle temporal gyrus | -49.7 | 6.4 | -15.2 | 16 | 0.013±0.327 | -0.105±0.287 |
| R-supra temporal gyrus | 56.5 | -8.5 | -14.3 | L-supra temporal gyrus | -57.1 | 14.5 | -6.8 | 16 | 0.009±0.386 | -0.103±0.345 |
| R-temporal pole | 40.0 | 18.9 | -34.2 | L-temporal pole | -49.5 | 11.1 | -30.6 | 15 | 0.128±0.373 | -0.008±0.326 |
| L-frontal eye field | -11.2 | 34.3 | 51.5 | L-ventral posterior cingulate cortex | -8.6 | -58.8 | 17.6 | 15 | 0.125±0.375 | 0.031±0.227 |
| R-dorsal lateral prefrontal cortex | 8.4 | 53.3 | 23.9 | R-frontal eye field | 23.9 | 30.7 | 36.4 | 14 | 0.105±0.228 | 0.045±0.261 |
| R-angular gyrus | 41.4 | -75.3 | 28.0 | L-pars Orbitalis | -46.0 | 28.2 | -7.1 | 14 | 0.033±0.237 | -0.082±0.349 |
| L-temporal pole | -38.0 | 6.1 | -37.9 | L-inferior temporal gyrus | -57.6 | -6.4 | -22.7 | 14 | 0.102±0.305 | 0.005±0.348 |
| L-anterior prefrontal cortex | -6.9 | 48.3 | -5.7 | L-inferior temporal gyrus | -57.6 | -6.4 | -22.7 | 13 | 0.091±0.361 | -0.008±0.357 |
| L-anterior prefrontal cortex | -11.7 | 65.1 | 4.2 | L-hippocampus | -32.1 | -40.2 | -4.0 | 12 | 0.035±0.223 | -0.069±0.334 |
| R-cerebellum | 21.2 | -36.4 | 2.6 | L-orbitofrontal cortex | -5.4 | 29.1 | -10.1 | 11 | 0.015±0.250 | -0.061±0.246 |
| R-temporal pole | 52.8 | 10.9 | -21.8 | L-temporal pole | -49.5 | 11.1 | -30.6 | 11 | 0.079±0.355 | -0.056±0.257 |
| R-supra temporal gyrus | 56.5 | -8.5 | -14.3 | R-dorsal anterior cingulate cortex | 7.8 | 34.7 | 17.1 | 10 | 0.058±0.301 | -0.035±0.310 |
| R-temporal pole | 52.8 | 10.9 | -21.8 | R-dorsal posterior cingulate cortex | 6.2 | -57.4 | 38.2 | 10 | 0.038±0.280 | -0.093±0.315 |
| R-ventral posterior cingulate cortex | 12.3 | -57.2 | 18.1 | L-temporal pole | -34.7 | 18.6 | -32.2 | 10 | 0.092±0.260 | 0.001±0.267 |
| R-temporal pole | 52.8 | 10.9 | -21.8 | L-visual association cortex | -41.3 | -75.4 | 22.8 | 10 | 0.134±0.276 | 0.022±0.218 |
| R-visual association cortex | 14.8 | -68.4 | 34.9 | R-temporal pole | 40.0 | 18.9 | -34.2 | 9 | -0.034±0.274 | -0.109±0.203 |
| R-ventral posterior cingulate cortex | 12.3 | -57.2 | 18.1 | L-orbitofrontal cortex | -5.4 | 29.1 | -10.1 | 9 | 0.081±0.246 | 0.002±0.290 |
| L-angular gyrus | -51.4 | -56.3 | 20.5 | L-ventral posterior cingulate cortex | -8.6 | -58.8 | 17.6 | 9 | 0.079±0.361 | -0.034±0.343 |
| R-dorsal lateral prefrontal cortex | 8.4 | 53.3 | 23.9 | L-temporal pole | -38.0 | 6.1 | -37.9 | 8 | 0.047±0.285 | -0.013±0.189 |
| L-dorsal lateral prefrontal cortex | -10.2 | 55.7 | 30.2 | L-supra temporal gyrus | -57.1 | 14.5 | -6.8 | 8 | 0.025±0.323 | -0.125±0.380 |
| R-supra temporal gyrus | 56.5 | -8.5 | -14.3 | L-pars Orbitalis | -46.0 | 28.2 | -7.1 | 6 | -0.010±0.287 | -0.110±0.203 |
| R-hippocampus | 28.8 | -36.9 | 0.0 | L-angular gyrus | -51.4 | -56.3 | 20.5 | 6 | 0.056±0.249 | -0.028±0.253 |
| R-supra temporal gyrus | 56.5 | -8.5 | -14.3 | R-ventral posterior cingulate cortex | 5.1 | -38.9 | 27.0 | 5 | 0.074±0.310 | -0.026±0.329 |
| L-anterior prefrontal cortex | -11.7 | 65.1 | 4.2 | L-dorsal lateral prefrontal cortex | -10.2 | 55.7 | 30.2 | 5 | 0.063±0.318 | -0.051±0.291 |
| R-cerebellum | 32.2 | -78.5 | -40.4 | L-angular gyrus | -42.1 | -65.6 | 41.7 | 5 | 0.018±0.295 | -0.089±0.359 |
| L-supra temporal gyrus | -57.1 | 14.5 | -6.8 | L-hippocampus | -32.1 | -40.2 | -4.0 | 5 | 0.104±0.242 | -0.041±0.375 |
| R-frontal eye field | 14.3 | 36.9 | 48.9 | R-ventral posterior cingulate cortex | 12.3 | -57.2 | 18.1 | 4 | 0.120±0.372 | 0.041±0.312 |
| R-dorsal lateral prefrontal cortex | 8.4 | 53.3 | 23.9 | R-cerebellum | 21.2 | -36.4 | 2.6 | 4 | 0.080±0.293 | 0.008±0.242 |
| R-supra temporal gyrus | 56.5 | -8.5 | -14.3 | L-anterior prefrontal cortex | -11.7 | 65.1 | 4.2 | 4 | 0.071±0.253 | -0.021±0.319 |
| R-anterior prefrontal cortex | 14.6 | 64.7 | 3.6 | L-dorsal lateral prefrontal cortex | -27.3 | 34.1 | 36.4 | 4 | 0.082±0.332 | -0.023±0.332 |
| R-orbitofrontal cortex | 13.9 | 56.9 | -16.6 | L-frontal eye field | -39.4 | 17.2 | 46.7 | 4 | 0.088±0.274 | -0.015±0.297 |
| R-frontal eye field | 14.3 | 36.9 | 48.9 | L-angular gyrus | -42.1 | -65.6 | 41.7 | 4 | 0.052±0.291 | -0.077±0.311 |
| L-frontal eye field | -39.4 | 17.2 | 46.7 | L-angular gyrus | -42.1 | -65.6 | 41.7 | 4 | 0.042±0.324 | -0.047±0.346 |
| R-ventral posterior cingulate cortex | 5.1 | -38.9 | 27.0 | L-supra temporal gyrus | -57.1 | 14.5 | -6.8 | 4 | 0.070±0.273 | -0.081±0.391 |
| R-cerebellum | 32.2 | -78.5 | -40.4 | L-supra temporal gyrus | -57.1 | 14.5 | -6.8 | 4 | 0.038±0.259 | -0.091±0.312 |
| L-middle temporal gyrus | -49.7 | 6.4 | -15.2 | L-fusiform | -26.7 | -42.7 | -16.1 | 4 | 0.035±0.285 | -0.092±0.291 |
| R-supra temporal gyrus | 61.9 | -23.8 | -2.8 | L-visual association cortex | -41.3 | -75.4 | 22.8 | 4 | 0.057±0.264 | -0.030±0.334 |
| R-orbitofrontal cortex | 13.9 | 56.9 | -16.6 | L-angular gyrus | -51.4 | -56.3 | 20.5 | 3 | -0.018±0.273 | -0.114±0.261 |
| L-anterior prefrontal cortex | 18.2 | 57.0 | -14.3 | L-angular gyrus | -51.4 | -56.3 | 20.5 | 3 | 0.052±0.299 | -0.070±0.214 |
| R-supra temporal gyrus | 56.5 | -8.5 | -14.3 | L-inferior temporal gyrus | -57.6 | -6.4 | -22.7 | 3 | 0.088±0.350 | -0.005±0.371 |
| R-frontal eye field | 14.3 | 36.9 | 48.9 | R-frontal eye field | 23.9 | 30.7 | 36.4 | 2 | 0.157±0.282 | 0.052±0.301 |
| R-angular gyrus | 47.8 | -61.9 | 34.7 | L-anterior prefrontal cortex | -6.9 | 48.3 | -5.7 | 2 | 0.052±0.328 | -0.051±0.289 |
| R-cerebellum | 21.2 | -36.4 | 2.6 | L-angular gyrus | -42.1 | -65.6 | 41.7 | 2 | 0.009±0.241 | -0.062±0.230 |
| R-frontal eye field | 23.9 | 30.7 | 36.4 | L-temporal pole | -38.0 | 6.1 | -37.9 | 2 | 0.051±0.241 | -0.034±0.305 |
| R-anterior prefrontal cortex | 8.2 | 45.9 | -1.7 | L-visual association cortex | -41.3 | -75.4 | 22.8 | 2 | 0.108±0.307 | 0.023±0.312 |
| L-temporal pole | -34.7 | 18.6 | -32.2 | L-hippocampus | -32.1 | -40.2 | -4.0 | 2 | 0.110±0.331 | -0.030±0.289 |
| R-frontal eye field | 14.3 | 36.9 | 48.9 | L-parahippocampus | -20.7 | -30.8 | -11.1 | 2 | 0.070±0.240 | -0.017±0.229 |
| R-ventral posterior cingulate cortex | 12.3 | -57.2 | 18.1 | L-frontal eye field | -11.2 | 34.3 | 51.5 | 1 | 0.130±0.352 | 0.017±0.282 |
| R-angular gyrus | 47.8 | -61.9 | 34.7 | L-angular gyrus | -51.4 | -56.3 | 20.5 | 1 | 0.016±0.320 | -0.080±0.294 |
| R-supra temporal gyrus | 56.5 | -8.5 | -14.3 | L-angular gyrus | -51.4 | -56.3 | 20.5 | 1 | -0.033±0.293 | -0.100±0.264 |
| L-anterior prefrontal cortex | -11.7 | 65.1 | 4.2 | L-supra temporal gyrus | -57.1 | 14.5 | -6.8 | 1 | 0.039±0.290 | -0.056±0.305 |
| L-temporal pole | -34.7 | 18.6 | -32.2 | L-supra temporal gyrus | -57.1 | 14.5 | -6.8 | 1 | 0.066±0.366 | -0.051±0.325 |
| L-temporal pole | -49.5 | 11.1 | -30.6 | L-supra temporal gyrus | -57.1 | 14.5 | -6.8 | 1 | 0.123±0.353 | -0.025±0.337 |
| L-anterior prefrontal cortex | -6.0 | 48.1 | 11.7 | L-visual association cortex | -41.3 | -75.4 | 22.8 | 1 | 0.093±0.286 | -0.001±0.259 |
| R-parahippocampus | 28.0 | -28.4 | -13.7 | L-ventral posterior cingulate cortex | -8.6 | -58.8 | 17.6 | 1 | 0.064±0.281 | -0.024±0.276 |
| R-temporal pole | 52.8 | 10.9 | -21.8 | L-ventral posterior cingulate cortex | -6.5 | -53.9 | 37.4 | 1 | 0.038±0.276 | -0.085±0.310 |
| L-middle temporal gyrus | -49.7 | 6.4 | -15.2 | L-parahippocampus | -20.7 | -30.8 | -11.1 | 1 | -0.033±0.276 | -0.145±0.409 |
| *Positive edge set* |  |  |  |  |  |  |  |  |  |  |
| R-visual association cortex | **14.8** | **-68.4** | **34.9** | **R-angular gyrus** | **41.4** | **-75.3** | **28.0** | **68** | **-0.068±0.296** | **0.072±0.265** |
| R-frontal eye field | **23.9** | **30.7** | **36.4** | **R-dorsal anterior cingulate cortex** | **7.8** | **34.7** | **17.1** | **68** | **-0.056±0.235** | **0.061±0.322** |
| R-temporal pole | **52.8** | **10.9** | **-21.8** | **R-cerebellum** | **32.2** | **-78.5** | **-40.4** | **68** | **-0.099±0.231** | **0.012±0.322** |
| R-parahippocampus | **28.0** | **-28.4** | **-13.7** | **L-anterior prefrontal cortex** | **18.2** | **57.0** | **-14.3** | **68** | **-0.107±0.261** | **0.033±0.210** |
| R-anterior prefrontal cortex | **14.6** | **64.7** | **3.6** | **L-anterior prefrontal cortex** | **-11.7** | **65.1** | **4.2** | **68** | **-0.125±0.407** | **0.066±0.390** |
| R-parahippocampus | **28.0** | **-28.4** | **-13.7** | **L-dorsal lateral prefrontal cortex** | **-27.3** | **34.1** | **36.4** | **68** | **-0.029±0.311** | **0.125±0.299** |
| L-frontal eye field | **-39.4** | **17.2** | **46.7** | **L-temporal pole** | **-34.7** | **18.6** | **-32.2** | **68** | **-0.043±0.247** | **0.081±0.194** |
| R-temporal pole | **40.0** | **18.9** | **-34.2** | **L-inferior temporal gyrus** | **-59.0** | **-30.0** | **3.5** | **68** | **-0.066±0.279** | **0.080±0.294** |
| R-temporal pole | **52.8** | **10.9** | **-21.8** | **L-inferior temporal gyrus** | **-59.0** | **-30.0** | **3.5** | **68** | **-0.149±0.258** | **0.059±0.326** |
| L-temporal pole | **-49.5** | **11.1** | **-30.6** | **L-inferior temporal gyrus** | **-59.0** | **-30.0** | **3.5** | **68** | **-0.026±0.294** | **0.108±0.287** |
| L-dorsal lateral prefrontal cortex | **-27.3** | **34.1** | **36.4** | **L-fusiform** | **-26.7** | **-42.7** | **-16.1** | **68** | **-0.075±0.275** | **0.043±0.261** |
| L-temporal pole | **-34.7** | **18.6** | **-32.2** | **L-dorsal anterior cingulate cortex** | **-6.0** | **34.1** | **26.3** | **68** | **-0.070±0.254** | **0.079±0.240** |
| L-anterior prefrontal cortex | **-6.9** | **48.3** | **-5.7** | **L-dorsal posterior cingulate cortex** | **-9.0** | **-42.6** | **50.1** | **68** | **-0.118±0.307** | **0.030±0.278** |
| R-cerebellum | **21.2** | **-36.4** | **2.6** | **L-retrolimbic area** | **-7.5** | **-42.1** | **13.3** | **68** | **-0.010±0.295** | **0.116±0.265** |
| R-visual association cortex | **14.8** | **-68.4** | **34.9** | **L-hippocampus** | **-21.5** | **-36.9** | **5.8** | **68** | **-0.113±0.234** | **0.030±0.225** |
| L-hippocampus | **-32.1** | **-40.2** | **-4.0** | **L-parahippocampus** | **-20.7** | **-30.8** | **-11.1** | **68** | **-0.080±0.283** | **0.054±0.259** |
| R-hippocampus | 28.8 | -36.9 | 0.0 | L-orbitofrontal cortex | -5.4 | 29.1 | -10.1 | 61 | -0.058±0.227 | 0.066±0.295 |
| R-hippocampus | 28.8 | -36.9 | 0.0 | L-anterior prefrontal cortex | 18.2 | 57.0 | -14.3 | 52 | -0.030±0.284 | 0.087±0.286 |
| L-angular gyrus | -42.1 | -65.6 | 41.7 | L-parahippocampus | -20.7 | -30.8 | -11.1 | 48 | 0.001±0.281 | 0.095±0.290 |
| R-anterior prefrontal cortex | 8.2 | 45.9 | -1.7 | R-hippocampus | 28.8 | -36.9 | 0.0 | 38 | 0.045±0.265 | 0.141±0.213 |
| L-middle temporal gyrus | -49.7 | 6.4 | -15.2 | L-dorsal posterior cingulate cortex | -9.0 | -42.6 | 50.1 | 36 | 0.039±0.265 | 0.155±0.289 |
| R-hippocampus | 28.8 | -36.9 | 0.0 | L-retrolimbic area | -7.5 | -42.1 | 13.3 | 31 | -0.007±0.294 | 0.126±0.355 |
| R-parahippocampus | 28.0 | -28.4 | -13.7 | L-dorsal anterior cingulate cortex | -6.0 | 34.1 | 26.3 | 30 | -0.072±0.257 | 0.031±0.211 |
| R-hippocampus | 28.8 | -36.9 | 0.0 | L-dorsal anterior cingulate cortex | -6.0 | 34.1 | 26.3 | 29 | 0.009±0.354 | 0.113±0.274 |
| R-parahippocampus | 28.0 | -28.4 | -13.7 | R-cerebellum | 32.2 | -78.5 | -40.4 | 26 | -0.095±0.283 | 0.032±0.317 |
| L-anterior prefrontal cortex | 18.2 | 57.0 | -14.3 | L-parahippocampus | -20.7 | -30.8 | -11.1 | 26 | -0.091±0.252 | 0.009±0.236 |
| R-orbitofrontal cortex | 13.9 | 56.9 | -16.6 | R-dorsal anterior cingulate cortex | 7.8 | 34.7 | 17.1 | 23 | -0.062±0.326 | 0.044±0.296 |
| L-frontal eye field | -39.4 | 17.2 | 46.7 | L-inferior temporal gyrus | -57.6 | -6.4 | -22.7 | 20 | -0.119±0.317 | 0.013±0.246 |
| R-supra temporal gyrus | 56.5 | -8.5 | -14.3 | L-frontal eye field | -39.4 | 17.2 | 46.7 | 18 | -0.028±0.297 | 0.097±0.303 |
| L-orbitofrontal cortex | -5.4 | 29.1 | -10.1 | L-anterior prefrontal cortex | -6.0 | 48.1 | 11.7 | 17 | -0.047±0.316 | 0.062±0.226 |
| L-pars Orbitalis | -46.0 | 28.2 | -7.1 | L-inferior temporal gyrus | -59.0 | -30.0 | 3.5 | 17 | -0.116±0.312 | 0.002±0.302 |
| L-frontal eye field | -11.2 | 34.3 | 51.5 | L-fusiform | -26.7 | -42.7 | -16.1 | 16 | -0.020±0.190 | 0.048±0.253 |
| R-supra temporal gyrus | 61.9 | -23.8 | -2.8 | L-dorsal anterior cingulate cortex | -6.0 | 34.1 | 26.3 | 16 | -0.008±0.237 | 0.067±0.282 |
| R-hippocampus | 28.8 | -36.9 | 0.0 | L-anterior prefrontal cortex | -6.0 | 48.1 | 11.7 | 15 | 0.071±0.295 | 0.147±0.297 |
| L-orbitofrontal cortex | -5.4 | 29.1 | -10.1 | L-inferior temporal gyrus | -59.0 | -30.0 | 3.5 | 15 | -0.037±0.287 | 0.045±0.210 |
| L-inferior temporal gyrus | -59.0 | -30.0 | 3.5 | L-supra temporal gyrus | -57.1 | 14.5 | -6.8 | 12 | -0.029±0.325 | 0.112±0.341 |
| R-visual association cortex | 14.8 | -68.4 | 34.9 | L-middle temporal gyrus | -49.7 | 6.4 | -15.2 | 11 | -0.068±0.229 | 0.028±0.276 |
| L-pars Orbitalis | -46.0 | 28.2 | -7.1 | L-parahippocampus | -20.7 | -30.8 | -11.1 | 7 | -0.048±0.233 | 0.059±0.283 |
| L-fusiform | -26.7 | -42.7 | -16.1 | L-dorsal anterior cingulate cortex | -6.0 | 34.1 | 26.3 | 6 | -0.059±0.238 | 0.025±0.285 |
| R-ventral posterior cingulate cortex | 12.3 | -57.2 | 18.1 | R-cerebellum | 21.2 | -36.4 | 2.6 | 5 | 0.000±0.184 | 0.082±0.210 |
| L-anterior prefrontal cortex | -11.7 | 65.1 | 4.2 | L-temporal pole | -34.7 | 18.6 | -32.2 | 5 | 0.007±0.335 | 0.099±0.268 |
| L-pars Orbitalis | -46.0 | 28.2 | -7.1 | L-temporal pole | -49.5 | 11.1 | -30.6 | 4 | -0.037±0.227 | 0.046±0.284 |
| L-dorsal lateral prefrontal cortex | -10.2 | 55.7 | 30.2 | L-frontal eye field | -39.4 | 17.2 | 46.7 | 3 | -0.071±0.286 | 0.048±0.287 |
| R-cerebellum | 32.2 | -78.5 | -40.4 | L-anterior prefrontal cortex | 18.2 | 57.0 | -14.3 | 2 | -0.005±0.257 | 0.088±0.373 |
| R-parahippocampus | 28.0 | -28.4 | -13.7 | L-frontal eye field | -39.4 | 17.2 | 46.7 | 2 | -0.001±0.232 | 0.074±0.239 |
| L-pars Orbitalis | -46.0 | 28.2 | -7.1 | L-retrolimbic area | -7.5 | -42.1 | 13.3 | 2 | -0.042±0.276 | 0.077±0.314 |
| R-orbitofrontal cortex | 13.9 | 56.9 | -16.6 | R-anterior prefrontal cortex | 14.6 | 64.7 | 3.6 | 1 | -0.070±0.462 | 0.095±0.428 |
| L-anterior prefrontal cortex | -6.0 | 48.1 | 11.7 | L-inferior temporal gyrus | -59.0 | -30.0 | 3.5 | 1 | -0.068±0.279 | 0.002±0.229 |

R, right; L, left; Frequency, number of times that the edge appeared in the LOOCV iterations; ΔrsFC, change in pre- and post-treatment resting state functional connectivity strength; nCPM, network connectome-based predictive modeling; DMN, default mode network; MNI, Montreal Neurological Institute; SD, standard deviation.