| Study | Type of FC-based input features | Features with high predictive value | Resolution of reporting features with high predictive value |
| --- | --- | --- | --- |
| Drysdale, 2017 | whole-brain between-ROI FCs | Functional connectivities between: dorsomedial PFC, amygdala, DLPF, bilateral orbitofrontal, posterior cingulate cortex, visual cortex (lingual, middle occipital), Thalamus, Nucleus accumbens, Globus Pallidus, VLPFC, primary sensorimotor cortex, ACC, ventral tegmentum area (more Information on coordinates in Supplement, Table 7) | ROIs |
| Hopman, 2021 | 4 specific ROI-to-cluster FCs:  sgACC - frontal pole (l), sgACC - superior parietal lobule (l), sgACC - lateral occipital cortex (l), DLPFC (l) - central opercular cortex (l) | From the 3 models that got significant across all metrics (A,D,E), one model used all 4 connectivities, the two other models used 3 connectivities, excluding either "sgACC-lateral occipital cortex" OR "sgACC - frontal pole". As 2 connectivities, namely "sgACC - superior parietal lobule" and "DLPFC - central opercular cortex", were among all significant models, we defined them as the most important connectivties. | single connectivities |
| Kong, 2021 | whole-brain between-ROI FCs | putamen (left/right), pallidum (right), hippocampus (left), amygdala (right), Caudate (right), triangular part of inferior frontal gyrus (in the paper, the inferior frontal gyrus and the triangular part are separately mentioned, however, in the corresponding figure, only the triangular part is depicted. Therefore, we assume that the triangular part of the inferior frontal gyrus was meant, insula left, lingual left, rectus left | ROIs |
| Moreno-Ortega, 2019 | 5 specific between- & within-ROI FCs:  DLPFC(p9-46v) - Fundal area of the superior temporal sulcus within MT+ Complex, DLPFC(p9-46v) - MT+ Complex, DLPFC(46) - s32(part of the ACC), connectivity within the ventral stream visual cortex, connectivity within 10r(part of medial prefrontal cortex) | Connectivity between DLPFC(p9-46v) and MT+(FST)(= Fundal area of the superior temporal sulcus in the middle temporal visual area), and within-connectivtiy in visual ventral stream network (Glasser coarse area 4) | single between-ROI or within-ROI connectivities |
| Pei, 2020 | seed-based whole-brain connectivity of 14 ROIs (all l/r):  orbital part superior frontal gyrus, triangular part inferior frontal gyrus, insula, anterior cingulate and paracingulate gyri, posterior cingulate gyrus, hippocampus, amygdala | subset: whole-brain connectivities from left HIP, left ORBsup, right HIP, (right PCG), right AMYG, and left ACG  wb: whole-brain connectivities from: left hip, right PCG | ROI-based set of connectivities |
| Schultz, 2018 | between-ROI FCs between 13 ROIs:  sgACC (l/r), amygdala (l/r), intraparietal sulcus (l/r), DLPFC (l/r), anterior insula (l/r), dACC, medial PFC, precuneus | DLPFC-left model had highest model accuracy (and was significant), 2nd significant model: left intraparietal sulcus | ROI-based set of connectivities |
| Sun, 2020 | whole-brain between-ROI FCs | Important connectivities of the negative feature model (best model): inferior frontal gyrus (IFG) - inferior temporal gyrus (ITG), IFG - parahippocampal gyrus (PhG), IFG - fusiform gyrus (FuG), Precuneus (Pcun) - middle frontal gyrus (MFG), BG - insular (INS). | single connectivities, grouped into connectivities between 24 coarse brain regions) |
| Tian, 2020 | node flexibilities per ROI | node-flexibilities of: right middle temporal gyrus, right middle occipital gyrus, left superior occipital gyrus, right middle frontal gyrus (2 nodes: belonging to cognitive control network and default mode network), left supplementary motor area, right insula, bilateral ACC | ROI-based connectivity features |
| van Waarde, 2015 | subject-specific spatial maps | after multiple comparisons: 2 networks: best network: centered in the DMPFC, including DLPFC, OFC, PCC; 2nd network: centered in the ACC, including sensorimotor cortex, parahippocampal gyrus and midbrain | brain regions IC components belong to |
| Wu, 2022 | between-ROI FCs between 36 emotion regulation regions of 4 networks:  network 1: medial superior frontal gyrus (l, BA 8), middle frontal gyrus (r, BA 8), inferior parietal lobule (l/r, BA 40), medial PFC (l, BA 10), middle frontal gyrus (l, BA 6), middle frontal gyrus (r, BA 11), insula (r), cingulate gyrus (r, BA 23), precuneus (r); network 2: inferior frontal gyrus (l/r, BA 47), superior frontal gyrus (l, BA 6), superior temporal gyrus (l, BA 39), middle temporal gyrus (l, no BA), middle frontal gyrus (l, BA 6), superior frontal gyrus (l, BA 9), caudate (l), tuber (r); network 3: amygdala (l/r), fusiform gyrus (l/r, BA 37), thalamus (r), parahippocampal gyrus (l), medial PFC (bilateral, BA 10), inferior occipital gyrus (l, BA 19); network 4: postcentral gyrus (l/r, BA 2), insula (l, BA 13), superior parietal lobule (l, BA 7), cuneus (l, BA 18), middle occipital gyrus (l, BA 19), thalamus (r), precuneus (r, BA 19), posterior cingulate (r, BA 30) | 21 connectivities, mainly between emotion networks 1 and 3 and networks 1 and 4:  medial superior frontal gyrus (BA 8)  inferior parietal lobule (BA 40)  middle frontal gyrus (BA 6)  insula (13)  precuneus (BA 7)  inferior frontal gyrus (BA 47)  superior frontal gyrus (BA 9)  caudate  amygdala  thalamus  medial PFC (BA 10)  precuneus (BA 19)  superior parietal lobule (BA 7)  posterior cingulate (BA 30)  postcentral gyrus (BA 2)  inferior occipital gyrus (BA 19)  parahippocampal gyrus (BA 27)  cuneus (BA 18) | single connectivities |
| Zhutovsky, 2019 | subject-specific spatial maps | 1. model based on pre-SMA network got significant, 2. selection frequency: largest clusters were located in the left inferior temporal gyrus (nvoxel = 14), left superior frontal gyrus (nvoxel = 10), and right precentral gyrus (nvoxel = 9). | 1. brain regions IC components belong to, 2. brain regions voxel-clusters belonged to |
| Zhutovsky, 2021 | subject-specific spatial maps, connectivity between ICs | 1 significant network: ICN centered on the bilateral superior temporal gyrus (STG), 2. no clear picture with respect to important voxels | 1. brain regions IC components belong to, 2. single voxels |