| Study | FC-based input features | Features with high predictive value | Resolution of reporting features with high predictive value |
| --- | --- | --- | --- |
| Drysdale, 2017 | whole-brain between-ROI FCs | FCs of: dorsomedial PFC, amygdala, dorsolateral PCF, bilateral orbitofrontal cortex, posterior cingulate cortex, visual cortex (lingual, middle occipital), thalamus, nucleus accumbens, globus pallidus, ventrolateral , primary sensorimotor cortex, anterior cingulate cortex, ventral tegmental area | ROIs |
| Hopman, 2021 | 4 specific ROI-to-cluster FCs:  subgenual anterior cingulate cortex (sgACC) - frontal pole (l), sgACC - superior parietal lobule (l), sgACC - lateral occipital cortex (l), dorsolateral PFC (l) - central opercular cortex (l) | From the 3 models that got significant across all metrics (A, D, E), one model used all 4 FCs, the two other models used 3 FCs, excluding either "subgenual anterior cingulate cortex - lateral occipital cortex" OR "subgenual anterior cingulate cortex - frontal pole". As 2 FCs, namely "subgenual anterior cingulate cortex - superior parietal lobule" and "dorsolateral PFC - central opercular cortex", were among all significant models, we defined them as the most important FCs. | single connectivities |
| Kong, 2021 | whole-brain between-ROI FCs | putamen (l/r), pallidum (r), hippocampus (l), amygdala (r), caudate (r), 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 (l), lingual (l), rectus (l) | ROIs |
| Moreno-Ortega, 2019 | 5 specific between- & within-ROI FCs:  dorsolateral PFC (p9-46v) - Fundal area of the superior temporal sulcus within MT+ Complex, dorsolateral PFC (p9-46v) - MT+ Complex, dorsolateral PFC (46) - subgenual anterior cingulate cortex, connectivity within the ventral stream visual cortex, connectivity within 10r (part of medial prefrontal cortex) | FC between dorsolateral PFC(p9-46v) and MT+(FST)(= Fundal area of the superior temporal sulcus in the middle temporal visual area), and FC within the 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 of superior frontal gyrus, triangular part inferior frontal gyrus, insula, anterior cingulate gyrus, paracingulate gyrus, posterior cingulate gyrus, hippocampus, amygdala | subset: whole-brain FCs from hippocampus (l), orbital part of the superior frontal gyrus (l), hippocampus (r), posterior cingulate gyrus (r), amygdala (r), and anterior cingulate gyrus (l)  wb: whole-brain FCs from: hippocampus (left), posterior cingulate gyrus (r) | ROI-based set of connectivities |
| Schultz, 2018 | between-ROI FCs between 13 ROIs:  subgenual anterior cingulate cortex (l/r), amygdala (l/r), intraparietal sulcus (l/r), dorsolateral PFC (l/r), anterior insula (l/r), dorsal anterior cingulate cortex, medial PFC, precuneus | Dorsolateral PFC (l) 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 FCs of the negative feature model (best model): inferior frontal gyrus - inferior temporal gyrus, inferior frontal gyrus - parahippocampal gyrus, inferior frontal gyrus - fusiform gyrus, precuneus - middle frontal gyrus, basal ganglia - insula. | 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 anterior cingulate cortex | ROI-based connectivity features |
| van Waarde, 2015 | subject-specific spatial maps | best network: centered in the dorsomedial PFC, including dorsolateral PFC, orbitofrontal cortex, posterior cingulate cortex;  2nd network: centered in the anterior cingulate cortex, including sensorimotor cortex, parahippocampal gyrus and midbrain | brain regions belonging to independent component |
| 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 FCs, 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-supplementary motor area network got significant, 2. selection frequency: largest clusters were located in the left inferior temporal gyrus (n\_voxel = 14), left superior frontal gyrus (n\_voxel = 10), and right precentral gyrus (n\_voxel = 9). | 1. brain regions belonging to independent component, 2. brain regions which overlap with voxel-clusters |
| Zhutovsky, 2021 | subject-specific spatial maps, connectivity between independent components | 1 significant network: centered on the bilateral superior temporal gyrus (STG), 2. no clear picture with respect to important voxels | 1. brain regions belonging to independent component, 2. single voxels |