**Whole-brain (masked) analyses results for the merged ADHD and control group**



**Supplementary Fig. S1.** Brain activation map averaged over 19 ADHD and 21 control subjects depicting areas exhibiting activation increases upon rest cues (rest cue vs. task cue). A – whole brain unmasked contrast; B – whole-brain contrast inclusively masked by standard DMN mask; FWE-cluster level corrected *p* < 0.05.

**Supplementary Table S1.** Overview of peak activation coordinates of areas for the rest cue vs. task cue contrast.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | MNI coordinates |  |  |  |
| Region | Hemisphere | x | y | z | Cluster extent | *Z*-value | FWE-corrected cluster *p*-value |
| Cuneus | L | -18  | -74 | -12 | 2402 | 7.59 | 0.000 |
|  | L | -18 | -88 | 30 |  | 7.58 |  |
|  | L | -46 | -77 | 20 |  | 7.50 |  |
| Middle temporal gyrus | L | -57 | 4 | -12 | 276 | 7.00 | 0.000 |
|  | L | -57 | -7 | -4 |  | 6.98 |  |
|  | L | -54 | -7 | -15 |  | 6.82 |  |
| Superior medial frontal gyrus | R | 13 | 63 | 20 | 578 | 6.72 | 0.000 |
|  | R | 16 | 42 | 44 |  | 6.31 |  |
|  | L | -8 | 52 | 34 |  | 6.28 |  |
| Middle temporal gyrus | R | 62 | -14 | -8 | 373 | 6.22 | 0.000 |
|  | R | 55 | 0 | -18 |  | 6.10 |  |
|  | R | 62 | 4 | 6 |  | 5.96 |  |
| Precuneus | L | -12 | -49 | 41 | 159 | 618 | 0.000 |
|  | R | 10 | -42 | 52 |  | 5.91 |  |
|  | L | -18 | -35 | 48 |  |  |  |
|  |  |  |  |  |  |  |  |

**Supplementary Table S2.** Overview of peak activation coordinates of DMN areas for the rest cue vs. task cue contrast inclusively masked by the standard DMN mask.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | MNI coordinates |  |  |  |
| Region | Hemisphere | x | y | z | Cluster extent | *Z*-value | FWE-corrected cluster *p*-value |
| Superior medial frontal gyrus | R | 13 | 63 | 20 | 472 | 6.72 | 0.000 |
|  | R | 16 | 42 | 44 |  | 6.31 |  |
|  | L | -8 | 52 | 34 |  | 6.28 |  |
| Precuneus | L | -12 | -49 | 41 | 75 | 6.18 | 0.000 |
|  | R | 10 | -42 | 52 |  | 5.91 |  |
|  | R | 10 | -52 | 41 |  | 5.41 |  |

**Supplementary Fig. S2.** Brain activation map averaged over 19 ADHD and 21 control subjects depicting areas exhibiting activation increases upon switch cues (switch cue vs. repeat cue). A – whole brain unmasked contrast; B – whole-brain contrast inclusively masked by standard SN mask; FWE-cluster level corrected p < 0.05.



**Supplementary Table S3.** Overview of peak activation coordinates of areas for the switch cue vs. repeat cue contrast.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | MNI coordinates |  |  |  |
| Region | Hemisphere | x | y | z | Cluster extent | *Z*-value | FWE-corrected cluster *p*-value |
| Inferior parietal lobule | L | -39 | -49 | 44 | 1183 | 6.84 | 0.000 |
|  | L | -12 | -74 | 41 |  | 6.65 |  |
|  | L | -50 | -42 | 48 |  | 6.48 |  |
| Supplementary motor area | L | -8 | 10 | 58 | 1560 | 6.62 | 0.000 |
|  | L | -15 | 4 | 62 |  | 6.55 |  |
|  | L | -29 | 24 | 10 |  | 6.34 |  |
| Cingulate gyrus | L | -4 | -35 | 27 | 176 | 6.43 | 0.000 |
|  | L | -1 | -18 | 30 |  | 5.79 |  |
|  | L | -1 | -7 | 34 |  | 5.01 |  |
| Right anterior insula | R | 34 | 28 | 6 | 132 | 6.02 | 0.000 |
|  | R | 24 | 21 | -1 |  | 5.49 |  |
| Cerebellum  | R | 38 | -56 | -29 | 61 | 5.92 | 0.000 |
|  | R | 24 | -63 | -29 |  | 5.32 |  |
| Fusiform gyrus | L | -54 | -60 | -15 | 96 | 5.75 | 0.000 |
|  | L | -43 | -56 | -29 |  | 5.72 |  |
|  | L | -46 | -63 | -12 |  | 5.62 |  |

**Supplementary Table S4.** Overview of peak activation coordinates of SN areas for the switch cue vs. repeat cue contrast inclusively masked by the standard SN mask.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | MNI coordinates |  |  |  |
| Region | Hemisphere | x | y | z | Cluster extent | *Z*-value | FWE-corrected cluster *p*-value |
| Left anterior insula | L | -29 | 24 | 10 | 79 | 6.34 | 0.000 |
| Right anterior insula | R | 34 | 28 | 6 | 46 | 6.02 | 0.000 |
| Anterior cingulate | L | -8 | 32 | 27 | 79 | 5.72 | 0.000 |
|  | R | 10 | 32 | 27 |  | 5.68 |  |