

**Supplementary Table 1.** Regions of GMV loss in patients compared to healthy controls (uncorrected  $p=0.001$ , 10 voxel clusters =  $33.75\text{mm}^3$ )

*GMV: Left HS < Controls*

<b><u>Region</u></b>	<b><u>Cluster size (mm<sup>3</sup>)</u></b>	<b><u>Z score</u></b>	<b><u>MNI coordinates</u></b>
Left hippocampus	6770	6.98	-30,-30,-5
Left inferior parietal lobe	496	3.97	-24,-51,42
Left occipital lobe (calcarine)	199	3.48	-18,-103,-6

*GMV: Left HS > Controls*

<b><u>Region</u></b>	<b><u>Cluster size (mm<sup>3</sup>)</u></b>	<b><u>Z score</u></b>	<b><u>MNI coordinates</u></b>
Right anterior cingulate	64	3.32	10,20,27
Right parietal lobe (postcentral)	44	3.25	12,-37,78

*GMV: Right HS < Controls*

<b><u>Region</u></b>	<b><u>Cluster size (mm<sup>3</sup>)</u></b>	<b><u>Z score</u></b>	<b><u>MNI coordinates</u></b>
Right hippocampus	6318	7.21	33,-25,-6
Right occipital lobe (calcarine)	1823	4.49	15,-97,3
Right middle temporal gyrus (posterior)	2157	4.44	52,-64,7
Right middle frontal gyrus	1286	4.09	24,-12,52
Right superior temporal gyrus (anterior)	577	4.09	33,9,-30
Right caudate	520	3.75	15,6,21
Right occipital lobe (superior)	1944	3.73	24,-93,27
Right superior temporal gyrus (posterior)	263	3.72	56,-34,19
Right inferior parietal lobe	1073	3.67	42,-46,49
Right middle temporal gyrus	830	3.59	60,-37,1
Right occipital lobe (inferior occipital gyrus)	543	3.56	33,-82,-11
Right occipital lobe (calcarine)	250	3.52	-9,-73,10

Right middle temporal gyrus (posterior)	429	3.38	52,-72,25
Right posterior cerebellum	290	3.38	8,-67,-35
Left caudate	203	3.37	-15,6,19
Left occipital lobe (BA18)	57	3.21	-20,-103,-5
Right precentral gyrus	41	3.19	51,-12,45
Left occipital lobe (calcarine)	34	3.18	-6,-96,4

*GMV: Right HS > Controls*

<b><u>Region</u></b>	<b><u>Cluster size (mm<sup>3</sup>)</u></b>	<b><u>Z score</u></b>	<b><u>MNI coordinates</u></b>
None			

**Supplementary Table 2.** Regions where GMV correlated with working memory performance (uncorrected  $p=0.001$ , 10 voxel clusters = 33.75 mm<sup>3</sup>)

*Left HS*

<b><u>Region</u></b>	<b><u>Cluster size (mm<sup>3</sup>)</u></b>	<b><u>Z score</u></b>	<b><u>MNI coordinates</u></b>
Right SFG (SMA)	49	3.33	3,-6,72
Right superior parietal lobe	51	3.25	14,-66,57
Left SFG (inferior)	47	3.24	-24,51,-20

*Right HS*

<b><u>Region</u></b>	<b><u>Cluster size (mm<sup>3</sup>)</u></b>	<b><u>Z score</u></b>	<b><u>MNI coordinates</u></b>
Left frontal (medial SFG)	4384	4.05	-9,30,52
Posterior cerebellum	6649	3.88	0,-75,-32
Left cerebellum (fusiform)	2376	3.74	-22,-34,-23
Right frontal (MFG)	98	3.61	30,2,66
Right frontal (precentral)	1121	3.60	47,-9,42
Right cerebellum (inferior)	4590	3.59	24,-73,-51
Right frontal (paracentral lobule)	257	3.55	4,-36,66
Left precuneus	64	3.48	-2,-55,63
Left precuneus	182	3.48	-9,-60,34
Left precuneus	263	3.46	-18,-51,55
Left frontal (SFG)	408	3.44	-16,54,37
Right occipital (lingual gyrus)	405	3.38	20,-85,-8
Left frontal (SFG)	132	3.34	-21,-3,51
Left temporal (posterior MTG)	44	3.28	-45,-61,4

**Supplementary Table 3.** Regions where FA correlated with working memory performance (uncorrected  $p=0.001$ , age as covariate, 10 voxel clusters = 10 mm<sup>3</sup>)

*Healthy controls (positive correlation)*

<u>Region</u>	<u>Cluster size (mm<sup>3</sup>)</u>	<u>Z score</u>	<u>MNI coordinates</u>
Right ITG	33	3.54	49,-7,-35
Left SFG	14	3.48	-17,35,45
Left SFG	15	3.42	-22,-8,62

*Healthy controls (negative correlation)*

<u>Region</u>	<u>Cluster size (mm<sup>3</sup>)</u>	<u>Z score</u>	<u>MNI coordinates</u>
Left superior parietal lobe / SLF	28	3.53	-34,-51,55

*Left HS (positive correlation)*

<u>Region</u>	<u>Cluster size (mm<sup>3</sup>)</u>	<u>Z score</u>	<u>MNI coordinates</u>
Right MFG	59	3.79	25,8,50
Right ITG / fusiform gyrus	89	3.46	42,-8,-33
Left MFG	96	3.41	-21,47,-6
Left inferior parietal lobe (angular gyrus / SLF)	43	3.40	-40,-62,29
Right posterior cingulum	11	3.35	5,-29,43
Right posterior cingulum	37	3.34	7,-56,54
Right inferior parietal lobe	31	3.27	34,-68,37

*Left HS (negative correlation)*

<u>Region</u>	<u>Cluster size (mm<sup>3</sup>)</u>	<u>Z score</u>	<u>MNI coordinates</u>
Left frontal (paracentral lobule)	22	3.55	-10,-30,71
Left parietal (postcentral)	31	3.32	-45,-24,58

*Right HS (positive correlation)*

<b><u>Region</u></b>	<b><u>Cluster size (mm<sup>3</sup>)</u></b>	<b><u>Z score</u></b>	<b><u>MNI coordinates</u></b>
Right precuneus / cingulum	300	4.06	13,-70,43
Left inferior parietal lobe (supramarginal / SLF)	47	4.01	-52,-36,29
Left posterior MTG / R ILF	30	3.88	-52,-18,-14
Right anterior cerebellum	423	3.79	10,-56,-35
Left anterior cerebellum	219	3.71	-9,-55,-37
Left posterior STG / R ILF	29	3.41	-56,-20,-2
Left anterior PHG / cingulum	19	3.32	-28,-22,-22
Left anterior STG / R ILF	49	3.24	-51,-6,-10
Left posterior cerebellum	20	3.24	-5,-55,-46

*Right HS (negative correlation)*

<b><u>Region</u></b>	<b><u>Cluster size (mm<sup>3</sup>)</u></b>	<b><u>Z score</u></b>	<b><u>MNI coordinates</u></b>
Right posterior cerebellum	15	3.20	28,-58,-53

**Supplementary Table 4.** Regions where MD correlated with working memory performance (uncorrected  $p=0.001$ , age as covariate, 10 voxel clusters = 10 mm<sup>3</sup>)

*Healthy controls (positive correlation)*

<b><u>Region</u></b>	<b><u>Cluster size (mm<sup>3</sup>)</u></b>	<b><u>Z score</u></b>	<b><u>MNI coordinates</u></b>
Right precuneus / occipital	50	3.43	17,-77,44

*Healthy controls (negative correlation)*

<b><u>Region</u></b>	<b><u>Cluster size (mm<sup>3</sup>)</u></b>	<b><u>Z score</u></b>	<b><u>MNI coordinates</u></b>
None			

*Left HS (positive correlation)*

<b><u>Region</u></b>	<b><u>Cluster size (mm<sup>3</sup>)</u></b>	<b><u>Z score</u></b>	<b><u>MNI coordinates</u></b>
None			

*Left HS (negative correlation)*

<b><u>Region</u></b>	<b><u>Cluster size (mm<sup>3</sup>)</u></b>	<b><u>Z score</u></b>	<b><u>MNI coordinates</u></b>
Left SFG (medial) / cingulum	90	3.94	-10,25,55
Right superior parietal lobe / R IFOF	57	3.57	19,-70,52
Left superior parietal lobe / L SLF	25	3.38	-21,-63,56
Right frontal (orbitofrontal)	15	3.38	29,28,-20
Right cingulum	34	3.31	5,-58,43
Left parietal (postcentral)	17	3.31	-60,-12,22
Right frontal (orbitofrontal)	16	3.24	30,54,-8

*Right HS (positive correlation)*

<b><u>Region</u></b>	<b><u>Cluster size (mm<sup>3</sup>)</u></b>	<b><u>Z score</u></b>	<b><u>MNI coordinates</u></b>
None			

*Right HS (negative correlation)*

<b><u>Region</u></b>	<b><u>Cluster size (mm<sup>3</sup>)</u></b>	<b><u>Z score</u></b>	<b><u>MNI coordinates</u></b>
None			