

**Table S1: ADAScog Error Change Negatively Correlated with fMRI N>R change**

<b>Region</b>	<b>Peak X Y Z</b>	<b>Peak T-statistic</b>	<b>Cluster Size (mm<sup>3</sup>)</b>
L. Hippocampus	-28 -24 -2	5.2342	1056
R. Superior Occipital Gyrus	22 -78 20	4.3072	704
R. Insula	38 -16 14	4.2258	712
R. Hippocampus	26 -32 -6	4.0401	608
L. Cerebellum Crus I	-36 -48 -32	3.942	672
R. Middle Temporal Gyrus	58 -48 6	3.8834	440
R. Cerebellum IV,V	18 -46 -18	3.8576	608
R. Inferior Temporal Gyrus	44 2 -42	3.7511	792
R. Inferior Temporal Gyrus	34 6 -44	3.0016	

**Table S2: ADAScog Recognition Error Change Negatively Correlated with fMRI N>R Change**

<b>Region</b>	<b>Peak X Y Z</b>	<b>Peak T-</b>	<b>Cluster Size</b>
L. Inferior Parietal Lobule	-56 -34 52	3.8079	552
R. Supramarginal Gyrus	60 -26 48	3.711	448
R. Cerebellum IV,V	18 -46 -18	3.5788	432

**Table S3: FCSRT Free Recall Change Correlated with fMRI N>R Change**

<b>Region</b>	<b>Peak X Y Z</b>	<b>Peak T-statistic</b>	<b>Cluster Size</b>
L. Postcentral Gyrus	-32 -32 42	5.2027	3448
L. Precentral Gyrus	-30 -22 46	4.5145	
L. Inferior Parietal Lobule	-22 -44 52	3.6575	
L. Precuneus	0 -72 54	4.3929	1296
L. Precuneus	-8 -60 66	3.2623	
R. Middle Frontal Gyrus	22 50 6	4.0776	736
R. Inferior Parietal Lobe	48 -46 58	4.0685	752
R. Postcentral Gyrus	50 -32 50	3.1029	
R. Postcentral Gyrus	32 -28 44	4.025	5712
L. Precuneus	0 -42 62	3.9418	
R. Middle Cingulate Gyrus	8 -38 50	3.8617	
L. Paracentral Lobule	-10 -26 76	3.6868	
R. Postcentral Gyrus	22 -42 62	3.554	
R. Paracentral Lobule	14 -34 58	3.3392	
R. Postcentral Gyrus	30 -32 60	3.1435	
L. Posterior Cingulate Cortex	-16 -48 28	3.963	840
L. Insula	-34 -10 4	3.8829	1056
L. Lingual Gyrus	-14 -34 -4	3.8538	1256
L. Parahippocampus	-12 -18 -18	3.3083	
L. Hippocampus	-18 -20 -12	3.2558	
R. Precentral Gyrus	48 -4 30	3.8416	1336
R. Middle Frontal Gyrus	42 10 44	3.2619	
R. Fusiform Gyrus	28 -50 -12	3.6843	440
R. Fusiform Gyrus	26 -40 -16	3.0382	
L. Precuneus	-8 -58 18	3.3834	512
L. Postcentral Gyrus	-62 -14 30	3.2757	512
L. Fusiform Gyrus	-24 -64 -16	3.2105	544
R. Rolandic Operculum	58 8 14	3.1467	656
R. Inferior Frontal Operculum	46 12 18	3.0697	

**Table S4: MMSE Change Correlated with fMRI N>R Change**

<b>Region</b>	<b>Peak X Y Z</b>	<b>Peak T-statistic</b>	<b>Cluster Size</b>
R. Middle Occipital Lobe	30 -74 26	3.7983	504

**Table S5: Post-scan Memory Test-1 Change Correlated with fMRI N>R Change**

<b>Region</b>	<b>Peak X Y Z</b>	<b>Peak T-statistic</b>	<b>Cluster Size</b>
L. Angular Gyrus	-54 -62 24	4.9363	1280
L. Middle Temporal Gyrus	-58 -58 18	4.3518	
R. Brainstem	4 -22 -35	4.4772	2760
L. Parahippocampal Gyrus	-12 -20 -28	4.2584	
R. Cerebellum III	14 -24 -26	4.2337	
L. Brainstem	-12 -22 -36	3.9487	
L. Inferior Frontal Gyrus Orbital	-38 46 -16	3.893	744
L. Inferior Frontal Gyrus Orbital	-40 36 -14	3.3924	
L. Inferior Frontal Gyrus Orbital	-34 26 -14	3.0615	
R. Precentral Gyrus	46 -18 44	3.7864	1128
R. Supplemental Motor Area	8 20 48	3.77	824
R. Middle Frontal Gyrus	38 26 30	3.7667	600
R. Inferior Frontal Gyrus Pars Triangula	38 34 26	3.6976	
L. Superior Medial Frontal Gyrus	-4 52 24	3.6831	840
L. Superior Frontal Gyrus	-14 52 28	3.5253	
L. Superior Medial Frontal Gyrus	-6 58 14	3.0412	
R. Cerebellum X	20 -42 -40	3.6173	616
R. Cerebellum X	18 -34 -40	3.1191	
L. Superior Temporal Pole	-50 8 -20	3.6137	1816
L. Superior Temporal Pole	-42 10 -16	3.5969	
L. Insula	-30 10 -20	3.2639	
L. Putamen	-26 -12 10	3.4192	680

**Table S6: Post-scan Memory Test-2 Change Correlated with fMRI N>R Change**

<b>Region</b>	<b>Peak X Y Z</b>	<b>Peak T-</b>	<b>Cluster Size</b>
L. Cerebellum IV,V	-18 -34 -32	5.6406	48800
R. Fusiform Gyrus	38 -48 -22	5.3984	
R. Cerebellum IX	16 -56 -34	5.3365	
R. Cerebellum Crus I	20 -78 -30	5.1734	
R. Cerebellum IV,V	28 -46 -20	4.8686	
L. Cerebellum VI	-16 -58 -32	4.8102	
Cerebellum Vermis 1,2	6 -48 -24	4.6749	
R. Cerebellum XI	8 -44 -40	4.6071	
L. Cerebellum I,V	-12 -48 -28	4.5592	
R. Cerebellum III	12 -32 -32	4.4674	
R. Brainstem	4/30/1934	4.4302	
R. Cerebellum IV,V	22 -28 -32	4.402	
Cerebellum Vermis 8	4 -68 -42	4.3526	
L. Fusiform Gyrus	-34 -46 -24	4.3115	
Cerebellum Vermis 8	4 -60 -32	4.2449	
Cerebellum Vermis 9	4 -60 -40	4.2223	
R. Cerebellum IV,V	26 -38 -34	4.1732	
R. Inferior Temporal Gyrus	44 -52 -14	4.1177	
L. Fusiform Gyrus	-44 -50 -20	4.0289	
R. Inferior Occipital Lobe	42 -64 -12	4.0122	
R. Cerebellum Crus I	40 -52 -30	4.0022	
R. Cerebellum IV,V	16 -46 -22	3.9734	
R Cerebellum Crus I	40 -52 -38	3.935	
L. Calcarine Sulcus	-20 -70 8	3.8588	
R. Cerebellum XI	10 -58 -54	3.7355	
L. Lingual Gyrus	-6 -60 2	3.7107	
L. Cerebellum VIII	-28 -46 -42	3.6344	
L. Inferior Temporal Gyrus	-40 -34 -16	3.6061	
L. Lingual Gyrus	-10 -72 -6	3.3944	
L. Lingual Gyrus	-20 -74 -4	3.1464	
R. Cerebellum VI	18 -66 -18	3.0998	
Cerebellum Vermis 4,5	4 -58 6	2.9894	
R. Cerebellum VI	20 -76 -18	2.9629	
L. Inferior Frontal Gyrus Pars Triangula	-48 38 18	5.4676	2688
L. Inferior Frontal Gyrus Pars Triangula	-60 26 12	4.4672	
L. Inferior Frontal Gyrus Pars Triangula	-56 36 12	4.3411	
L. Inferior Frontal Gyrus Pars Triangula	-56 36 -2	3.6987	
L. Inferior Frontal Gyrus Pars Triangula	-52 20 18	2.8942	
L. Inferior Parietal Lobule	-52 -34 44	5.3346	10336
L. Postcentral Gyrus	-48 -36 58	4.5166	
L. Postcentral Gyrus	-38 -32 46	4.2922	
L. Postcentral Gyrus	-56 -16 34	3.9571	
L. Precentral Gyrus	-40 -18 54	3.6818	
R. Inferior Frontal Gyrus Pars Triangula	50 24 12	5.3226	3720

R. Inferior Frontal Gyrus Pars Triangula	50 20 22	3.799	
R. Inferior Frontal Operculum	46 8 20	3.2604	
L. Inferior Frontal Gyrus Pars Triangula	48 34 24	3.0924	
R. Inferior Orbital Frontal	-42 28 -10	5.0186	3976
L. Superior Temporal Pole	-56 12 -6	4.7985	
L. Superior Temporal Pole	-50 20 -12	4.1147	
L. Inferior Frontal Gyrus Pars Triangula	-40 26 2	3.2693	
L. Rolandic Operculum	-62 10 2	3.1338	
L. Thalamus	-10 -28 -4	4.6804	1536
R. Superior Medial Frontal Gyrus	10 52 40	4.6101	4760
R. Superior Medial Frontal Gyrus	6 56 10	3.9787	
L. Anterior Cingulate Cortex	2 42 24	3.9092	
L. Superior Medial Frontal Gyrus	0 62 16	3.7368	
R. Superior Frontal Gyrus	14 38 48	3.3737	
R. Superior Medial Frontal Gyrus	4 58 22	3.0584	
R. Inferior Parietal Lobule	46 -38 50	4.5353	5752
R. Postcentral Gyrus	44 -34 60	3.8238	
R. Inferior Frontal Gyrus Orbital	42 34 -4	4.222	2304
R. Middle Frontal Gyrus	38 52 4	3.7982	
L. Lingual Gyrus	-28 -60 -2	4.0182	408
R. Hippocampus	24 -18 -16	3.9575	1160
L. Precentral Gyrus	-42 -2 60	3.7402	512
L. Superior Occipital Lobe	-12 -90 8	3.6353	576
R. Angular Gyrus	32 -66 48	3.5841	464
R. Paracentral Lobule	8 -34 70	3.4127	400
L. Middle Temporal Gyrus	-62 -12 0	3.2771	488

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