



S1. Resting state connectivity of the left (A) and right (B) claustrum at 7T with 3mm FWHM smoothing kernel. Data were voxel wise thresholded at $p < 0.001$ followed by FWE cluster correction. Blue ROI in A-D represents an average claustrum dilated by 1.5 mm (for visualization only).

Table S1: L Claustrum Functional Connectivity with Insula and Putamen Removed *7T-Rest*

Label	Side	x	y	z	Peak T-value	Cluster p-value (FWE-corr)	Cluster size (voxels)
Clastrum	L	-36	-10	-2	24.06395531	<0.001	59201
		-32	4	-6	18.89156532		
		-34	2	-4	18.54368019		
		-28	8	-10	17.50679398		
Thalamus (Ventral Lateral)	L	-10	-14	2	15.17824364		
Thalamus (Ventral Posterior Lateral)	L	-16	-20	0	15.15515137		
	R	8	-14	-6	13.77011967		
	R	12	-14	-2	13.30285454		
Thalamus (Pulvinar)	R	12	-26	2	12.7253046		
	L	-12	-30	0	12.51099586		
Subgenual Anterior Cingulate Cortex	R	4	20	-8	12.19818401		
Thalamus (Ventral Posterior Lateral)	R	24	-26	2	12.0723753		
Hippocampus	L	-32	-18	-16	11.83692551		
		-28	-8	-24	11.55429554		
Subgenual Anterior Cingulate Cortex	L	-6	24	-6	11.44417858		
Thalamus (Pulvinar)	R	18	-28	4	11.17559147		
Clastrum	L	-32	-24	2	10.87742901		
Thalamus (Pulvinar)	R	14	-24	10	10.73503971		
Clastrum	L	-30	-26	6	10.67422676		
Clastrum	R	32	10	-8	10.39802837		
Anterior Mid Cingulate Cortex	L	-6	24	18	10.3722086		
Thalamus (Ventral Posterior Lateral)	R	22	-20	2	10.27667427		
Subgenual Anterior Cingulate Cortex	L	-4	26	0	10.12805939		
Ventral Medial Prefrontal Cortex	L	-8	48	-12	9.763479233		
Pregenual Anterior Cingulate Cortex	L	-2	28	6	9.756249428		
Nucleus Accumbens	L	-16	12	8	9.620131493		
Thalamus (Ventral Posterior Lateral)	R	20	-16	4	9.616638184		

Nucleus Accumbens	R	16	12	8	9.511778831		
	L	-12	10	10	9.502311707		
Anterior Mid Cingulate Cortex	R	10	30	16	9.352282524		
Nucleus Accumbens	L	-16	8	6	9.338762283		
Hippocampus	L	-22	-12	-24	9.333524704		
Ventral Posterior Cingulate Cortex	L	-14	-48	6	9.283568382		
Nucleus Accumbens	R	16	14	4	9.234643936		
Superior Temporal Gyrus	R	38	-28	10	9.170275688		
Clastrum	R	28	14	-10	9.090922356		
Hippocampus	L	-28	-16	-22	9.072501183		
Pregenual Anterior Cingulate Cortex	L	-8	28	8	9.004393578		
Globus Pallidus Internal	L	-14	0	2	8.981911659		
Hippocampus	L	-28	-30	-12	8.873837471		
Pregenual Anterior Cingulate Cortex	L	-10	30	6	8.869677544		
Superior Temporal Sulcus	L	-42	-34	-2	8.849382401		
Ventral Lateral Prefrontal Cortex	L	-32	24	-16	8.767841339		
Medial Prefrontal Cortex	L	-8	62	12	8.754950523		
Ventral Lateral Prefrontal Cortex	R	38	28	-14	8.723095894		
Medial Prefrontal Cortex	L	-6	42	-6	8.706986427		
Hippocampus	R	34	-24	2	8.703000069		
Superior Temporal Gyrus	L	-52	-14	-8	8.632119179		
Globus Pallidus Internal	R	16	0	0	8.559850693		
Posterior Parietal Cortex	L	-38	-68	34	8.395782471		
Medial Prefrontal Cortex	R	16	56	0	8.355535507		
Hippocampus	R	22	-14	-20	8.251626968		
Putamen	R	18	4	4	8.233177185		
Superior Temporal Gyrus	R	44	-30	8	8.177122116		
Hippocampus	R	30	-8	-26	8.175160408		
		22	-10	-14	8.162754059		
Hippocampus	L	-22	-38	-2	8.059206963		
	R	12	-36	2	8.026491165		
	R	26	-12	-24	7.996898174		
Pons	L	-12	-24	-28	6.302366734	<0.001	271
	R	8	-26	-24	5.374338627		
	R	12	-24	-28	5.366235733		
		0	-24	-32	4.730604649		
	R	6	-24	-32	4.504598141		

	R	12	-30	-32	3.911982298		
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Table S2: R Claustrum Functional Connectivity with Insula and Putamen Removed *7T-Rest*

Label	Side	x	y	z	Peak T-value	Cluster p-value (FWE-corr)	Cluster size (voxels)
Clastrum	R	32	4	0	25.29956818	<0.001	54354
		34	-2	-4	24.39122009		
		32	10	-4	24.08267593		
		36	-8	-4	21.42823601		
	L	-30	6	-12	12.57529163		
Thalamus (Pulvinar)	R	22	-26	8	11.84923267		
		10	-24	2	11.27258396		
		24	-26	2	11.08607292		
Thalamus (Ventral Posterior Lateral)	R	16	-18	-4	10.74502373		
Thalamus (Anterior Nucleus)	L	-12	-2	2	10.71705818		
Thalamus (Ventral Posterior Lateral)	R	14	-18	0	10.65793514		
Midbrain	R	16	-22	-4	10.55012035		
Thalamus (Ventral Lateral)	R	12	-20	4	10.48565769		
Posterior Mid Anterior Cingulate Cortex	R	4	14	24	10.48087025		
Ventral Posterior Cingulate Cortex	L	-20	-56	6	9.868988037		
Middle Frontal Gyrus	R	36	6	28	9.627185822		
Clastrum	R	32	-18	14	9.588145256		
Thalamus (Pulvinar)	R	16	-24	10	9.451543808		
Superior Temporal Sulcus	R	48	-24	-6	9.438153267		
Anterior Mid Cingulate Cortex	L	-4	14	24	9.348632813		
Hippocampus	R	30	-10	-22	9.246312141		
Globs Pallidus Internal	R	22	-8	4	9.188798904		
Hippocampus	R	28	-32	-8	9.179620743		
		24	-6	-26	9.112071991		
Middle Frontal Gyrus	R	40	2	28	8.969317436		
Ventral Posterior Cingulate Cortex	R	16	-46	-2	8.960434914		

Thalamus (Pulvinar)	L	-20	-26	10	8.903382301		
Ventral Lateral Prefrontal Cortex	R	44	54	-6	8.849404335		
Angular Gyrus	R	52	-68	28	8.766235352		
Ventral Posterior Cingulate Cortex	L	-22	-62	6	8.74567318		
Globus Pallidus	R	14	-2	2	8.73133564		
Ventral Posterior Cingulate Cortex	R	20	-58	4	8.700037003		
Midbrain	L	-16	-22	-4	8.589623451		
Inferior Frontal Gyrus	R	50	24	-2	8.497831345		
Clastrum	L	-28	18	0	8.464349747		
Middle Temporal Sulcus	R	58	-50	-8	8.456132889		
Orbital Gyrus	R	26	12	-20	8.423750877		
Middle Temporal Sulcus	R	56	-48	-10	8.399514198		
Dorsal Lateral Prefrontal Cortex	R	48	18	40	8.394253731		
Ventral Lateral Prefrontal Cortex	R	44	34	-8	8.315858841		
Dorsal Lateral Prefrontal Cortex	R	52	16	42	8.29859066		
Temporo-Parietal Junction	R	52	-46	24	8.266856194		
Posterior Mid Cingulate Cortex	R	14	16	26	8.183446884		
Dorsal Premotor Cortex	R	42	4	48	8.14260006		
Ventral Lateral Prefrontal Cortex	R	28	22	-18	8.124418259		
Anterior Mid Cingulate Cortex	R	10	18	24	8.102245331		
Clastrum	R	28	-24	16	8.07894516		
Hippocampus	L	-26	-20	-24	8.072444916		
		-26	-24	-20	8.072433472		
		-22	-14	-24	8.022881508		
Thalamus (Ventral Lateral)	R	18	-16	8	8.013230324		
Middle Temporal Gyrus	R	60	-36	-4	7.854027271		
Thalamus (Pulvinar)	L	-12	-30	4	7.803732872		
Ventral Lateral Prefrontal Cortex	R	46	32	-2	7.759963036		
Midbrain	L	-10	-18	-2	7.750605583		
Subgenual Anterior Cingulate Cortex	L	-10	14	-12	7.735712528		
Cuneus	L	-8	-66	6	7.730248451		
Nucleus Accumbens	R	14	20	-4	7.70498848		

Thalamus (Ventral Lateral Posterior)	L	-8	-24	0	7.70159626		
Orbital Gyrus	R	32	18	-22	7.641664028		
Fusiform Gyrus	R	40	-46	-20	7.527080059		
Ventral Posterior Cingulate Cortex	R	20	-52	8	7.49554348		
Thalamus (Medial Dorsal)	L	-8	-14	4	7.489756107		
Clastrum	R	34	2	-16	7.465096474		
Cuneus	R	14	-86	8	7.459712982		
Globus Pallidus	R	18	2	2	7.441179752		
Dorsal Premotor Cortex	R	26	4	46	7.386868		
Ventral Lateral Prefrontal Cortex	R	26	54	4	7.323858261		
Dorsal Premotor Cortex	L	-24	-4	58	5.715116501	<0.001	293
Precentral Gyrus	L	-34	-6	40	5.648714542		
		-34	-10	50	5.337987423		
Dorsal Premotor Cortex	L	-24	2	48	4.654179096		
Precentral Gyrus	L	-30	-12	42	4.555616856		
Dorsal Premotor Cortex	L	-28	-2	46	4.31825304		
Precentral Gyrus	L	-38	-6	58	4.251635551		
		-36	-4	56	4.199534416		
		-46	-10	58	4.16604948		
Dorsal Lateral Prefrontal Cortex	L	-20	12	50	3.741257429		
Postcentral Gyrus	L	-22	-30	50	5.47414875	<0.001	423
Precentral gyrus	L	-24	-24	54	5.470678329		
Postcentral Gyrus	L	-26	-30	52	5.4689641		
		-26	-32	46	5.122312546		
		-48	-28	64	4.721522808		
		-38	-26	52	4.637797832		
		-50	-24	62	4.557812691		
		-48	-24	56	4.242319107		
		-40	-28	70	4.2090168		
		-36	-34	72	4.201920033		
Precentral Gyrus	L	-38	-24	70	4.129280567		
		-32	-26	74	4.065063477		
		-36	-28	72	4.044534683		
		-36	-22	72	4.013090611		
		-34	-20	74	3.865483522		
Postcentral Gyrus	L	-34	-26	46	3.837870598		
		-32	-20	66	3.770018816		
		-26	-28	62	3.714066982		

Table S3: L Claustrum Functional Connectivity with Insula and Putamen Removed 3T-Rest							
Label	Side	x	y	z	Peak T-value	Cluster p-value (FWE-corr)	Cluster size (voxels)
Clastrum	L	-36	-8	-4	27.57	1.82E-191	58478
	L	-30	4	-6	26.43		
Superior Temporal Gyrus	L	-52	-10	4	9.87		
Clastrum	R	36	2	-8	9.47		
Thalamus (Pulvinar)	L	-18	-26	-2	9.02		
Inferior Frontal Gyrus	L	-32	30	-8	8.93		
Central Sulcus	L	-36	-18	44	8.78		
Precentral Gyrus	L	-48	-6	48	8.38		
Clastrum	R	34	10	-6	8.2		
Parahippocampal Gyrus/lingual gyrus	L	-26	-38	-4	7.93		
Inferior Frontal Gyrus	R	42	32	-6	7.92		
Superior Temporal Gyrus	L	-48	4	-4	7.91		
Supramarginal Gyrus	L	-44	-74	16	7.88		
Globus Pallidus	L	-18	2	0	7.74		
Inferior Frontal Gyrus	R	58	24	2	7.7		
Dorsal Premotor Cortex	L	-34	0	48	7.65		
Superior Temporal Gyrus	R	58	0	-4	7.6		
Parietal Operculum	R	46	-60	10	7.57		
Midbrain (Red Nucleus)	L	-4	-16	-4	7.48		
Paracentral Lobule/Dorsal Posterior Cingulate Cortex	L	-2	-24	46	7.32		
Superior Temporal Gyrus	R	58	-12	6	7.31		
Ventrolateral Prefrontal Cortex	L	-48	30	-2	7.3		
Middle Temporal Gyrus	L	-58	-44	-4	7.29		
Precentral Sulcus	L	-42	2	50	7.28		
Precentral Gyrus	R	54	0	40	7.27		
Intraparietal Sulcus	R	22	-52	58	7.23		
Postcentral gyrus	L	-48	-16	46	7.2		
Supramarginal gyrus	L	-46	-40	20	7.2		
Cuneus	R	14	-88	26	7.08		
Fusiform Gyrus/ BA 37	L	-18	-62	4	7.05		
Nucleus Accumbens	R	8	6	4	7.01		

Thalamus (Ventral Lateral)	L	-12	-10	-6	7.01		
Posterior Mid Cingulate Cortex	L	-8	-12	38	6.92		
Middle Occipital Gyrus	R	16	-92	14	6.89		
Superior Temporal Gyrus	R	50	-30	14	6.86		
Middle Temporal Gyrus	R	44	8	-34	6.82		
Middle Temporal Gyrus (BA 37)	R	54	-68	6	6.79		
	L	-54	-50	4	6.79		
Precentral Gyrus	R	40	-6	44	6.76		
Dorsal Premotor Cortex	L	-36	0	60	6.74		
Dorsal Premotor Cortex	R	46	0	50	6.68		
Middle Temporal Gyrus	L	-54	-64	6	6.67		
Superior Temporal Gyrus	L	-58	-20	-2	6.66		
Globus Pallidus	L	-24	-10	2	6.63		
Postcentral Gyrus	L	-60	-16	16	6.58		
Superior Temporal Gyrus	R	62	-4	8	6.57		
Parahippocampal Gyrus	R	28	-36	-6	6.55		
Thalamus (Ventral Posterior medial)	R	6	-14	-2	6.53		
Inferior Frontal Gyrus	L	-50	16	20	6.52		
Thalamus (Pulvinar)	R	16	-28	2	6.51		
Putamen	R	24	-4	-34	6.51		
Precentral Gyrus	R	46	-18	40	6.49		
Central Lobule	L	-8	12	56	6.49		
	L	-4	8	38	6.49		
Cuneus	R	10	-80	4	6.43		
Dorsal Premotor Cortex	R	42	-4	60	6.43		
Precentral Gyrus	R	34	-26	6	6.42		
Dorsal Premotor Cortex	L	-26	-8	46	6.41		
Mid Insula	L	-48	8	6	6.39		
Ventrolateral Prefrontal Cortex	L	-40	40	-4	6.39		
Middle Temporal Gyrus	R	58	-12	30	6.36		
Middle Frontal Gyrus	L	-30	22	56	6.33		
Angular Gyrus	R	48	-76	12	6.32		
	L	-48	-68	12	6.32		
Parahippocampal Gyrus	R	24	-40	2	6.3		
Precentral Gyrus	R	54	-10	42	6.3		
Ventrolateral Prefrontal Cortex	R	50	32	-4	6.28		
Postcentral Gyrus	L	-50	-14	24	6.27		
Precuneus	R	6	-48	60	6.24		

Postcentral Gyrus	R	36	-22	42	6.23		
Lingual Gyrus	L	-10	-78	-8	6.21		
Superior Frontal Gyrus	L	-4	18	44	6.21		
	L	-2	6	56	6.21		
Dorsolateral Prefrontal Cortex	L	-8	56	28	5.5	9.00E-07	330
	L	-14	48	24	4.9		
	L	-14	48	38	4.68		
	L	-12	62	14	3.99		
	L	-8	48	46	3.81		
	L	-14	42	32	3.71		
Middle Temporal Gyrus	L	-44	8	-32	4.9	0.000739	123
	L	-46	20	-30	4.22		
	L	-34	24	-26	3.81		
Fusiform Gyrus/ BA 37	R	40	-48	-22	4.8	0.001144	112
	R	42	-54	-12	4.1		
	R	50	-48	-14	4.05		

Table S4: R Claustrum Functional Connectivity with Insula and Putamen Removed 3T-Rest

Label	Side	x	y	z	Peak T-value	Cluster p-value (FWE-corr)	Cluster size (voxels)
Clastrum	R	32	6	-4	30.04	<0.001	54586
	R	28	12	-8	23.9		
	L	-32	-20	-4	9.7		
Dorsal Posterior Cingulate Cortex	R	4	-40	38	8.27		
Dorsolateral Prefrontal Cortex	R	4	42	42	8.01		
Superior Temporal Gyrus (BA 22)	L	-60	-4	-2	7.73		
Pons	R	6	-28	-40	7.56		
Precentral Gyrus (BA 6)	L	-42	-6	44	7.49		
Postcentral Gyrus	R	36	-16	48	7.3		
Cerebellum (Tuber Cinereum)	L	-32	-68	-38	7.23		
Superior Temporal Gyrus	R	52	10	-10	7.19		
Midbrain/Ventral Posterior Lateral Thalamus	R	14	-14	-4	7.11		
Superior Temporal Gyrus	R	50	-8	-8	7.08		
Dorsolateral Prefrontal Cortex	R	24	32	48	6.93		
Ventrolateral Prefrontal Cortex	L	-44	34	-10	6.9		
Thalamus (Pulvinar)	L	-16	-30	-2	6.83		
Clastrum	L	-32	0	-10	6.8		
Supramarginal Gyrus	L	-40	-54	32	6.79		
Clastrum	L	-32	12	2	6.76		
Superior Temporal Gyrus	R	54	2	-8	6.74		
Midbrain (Red Nucleus)	R	2	-18	52	6.72		
Superior Temporal Gyrus (BA 38)	R	46	18	-14	6.71		
Parahippocampal Gyrus	R	30	-38	-6	6.68		
	L	-22	-52	0	6.68		
Middle Occipital Gyrus	R	48	-72	-10	6.62		
Middle Temporal Gyrus	L	-58	-16	-4	6.55		
Midbrain (Superior Colliculus)	R	2	-28	0	6.52		

Ventrolateral Prefrontal Cortex	R	48	24	-2	6.5		
Cuneus	L	-12	-92	26	6.5		
Ventrolateral Prefrontal Cortex	R	50	24	-10	6.48		
Angular Gyrus	R	54	-56	18	6.47		
Cerebellum	L	-6	-46	-42	6.47		
Precentral Gyrus	R	44	-10	46	6.46		
Nucleus Accumbens	L	-10	6	0	6.43		
Middle Temporal Gyrus	R	52	-42	4	6.42		
Fusiform Gyrus/ BA 37	L	-32	-38	-16	6.41		
Thalamus (Pulvinar)	R	16	-28	-2	6.4		
Ventral Lateral Prefrontal Cortex	L	-52	24	2	6.4		
Cuneus	R	14	-84	22	6.35		
	L	-4	-64	20	6.3		
Clastrum	L	-28	8	-10	6.28		
Inferior Occipital Gyrus	R	40	-72	0	6.26		
Superior Temporal Gyrus	R	54	-18	6	6.26		
Cuneus	L	-6	-74	24	6.24		
Anterior Insula	L	-32	24	2	6.23		
Middle Temporal Gyrus	R	50	6	-34	6.18		
Dorsal Lateral Prefrontal Cortex	L	-16	38	40	6.15		
Fusiform Gyrus/ BA 37	L	-38	-62	-20	6.11		
Middle Temporal Gyrus (Temporal Pole)	R	48	14	-34	6.1		
Midbrain	L	-2	-16	-6	6.08		
Extrastriate Cortex (BA 19)	L	-22	-70	-14	6.07		
Ventral Lateral Prefrontal Cortex	R	56	18	0	6.06		
Superior Temporal Sulcus	R	62	-36	0	6.06		
Cerebellum	L	-14	-48	-50	6.04		
Cuneus	R	6	-76	2	6.04		
Supramarginal Gyrus	R	50	-56	26	6.02		
Precuneus	L	-6	-58	50	6.02		
Pons	R	6	-30	-32	6.01		
Cuneus	L	-22	-90	20	6		
Inferior Occipital gyrus	L	-36	-82	-10	6		
Intraparietal Sulcus	R	20	-64	50	6		
Superior Frontal Sulcus	R	22	20	42	5.96		
Inferior Frontal Gyrus	R	52	26	8	5.96		
Middle Temporal Gyrus	L	-68	-12	-2	5.94		

Angular Gyrus	L	-46	-64	18	5.92		
Lingual Gyrus	R	26	-74	-10	5.91		
Dorsal Lateral Prefrontal Cortex	R	12	34	46	5.9		
Lingual Gyrus	L	-4	-72	-2	5.89		
Cerebellum Posterior Lobe	L	-40	-72	-30	5.89		
Middle Frontal Gyrus	R	26	40	34	5.84		

Table S5: Difficult Block vs Tapping MSIT							
Label	Side	x	y	z	Peak T-value	Cluster p-value (FWE-corr)	Cluster size (voxels)
<i>Activation</i>							
Inferior Occipital Gyrus	R	28	-88	-6	13.15	<0.001	22669
Lingual Gyrus	L	-16	-94	-10	12.25		
Middle Occipital Gyrus	L	-32	-90	0	10.78		
Inferior Occipital Gyrus	L	-36	-84	-6	10.31		
Dorsal Premotor Cortex	R	32	0	56	9.26	<0.001	2022
Superior Frontal Gyrus	R	2	14	48	8.78		
	L	-2	6	56	7.59		
	L	-6	12	48	7.37		
Dorsal Premotor Cortex	L	-28	0	54	8.5	<0.001	2477
Inferior Frontal Gyrus	L	-42	6	30	8.07		
Dorsal Premotor Cortex	L	-24	-4	62	7.44		
Inferior Frontal Gyrus	L	-50	8	34	6.97		
Thalamus (Ventral Lateral)	L	-18	-16	16	7.52	<0.001	865
	L	-18	-8	20	5.73		
Putamen	L	-28	-20	6	5.3		
	L	-24	0	12	5.23		
	R	24	-2	12	6.92	<0.001	919
Nucleus Accumbens	R	20	-6	22	6.92		

	R	20	6	20	6.52		
Putamen	R	28	-6	2	6.35		
Inferior Frontal Gyrus	R	46	10	28	6.61	<0.001	395
Orbitofrontal Gyrus	R	26	56	-16	5.48	0.015	129
	R	24	44	-22	5.29		
	R	20	64	-14	3.4		
Midbrain	R	6	-20	-14	5.36	0.011	137
	L	-6	-28	-14	4.58		
Anterior Insula	R	32	20	8	5.24	0.02	122
	R	30	32	2	3.84		
<i>Deactivation</i>							
Medial prefrontal cortex	R/L	0	30	-14	8.97	<0.001	10064
Dorsal Lateral Prefrontal Cortex	L	-14	48	38	7.79		
Medial prefrontal cortex	R	2	38	-6	7.57		
	L	-4	44	-8	7.41		
Temporal Parietal Junction	L	-62	-62	16	8.55	<0.001	3306
Angular gyrus	L	-44	-80	32	8.14		
	L	-50	-72	36	7.72		
	L	-34	-86	38	7.14		
Middle Temporal Gyrus	R	64	-12	-12	8.34	<0.001	3858
	R	54	-8	-14	8.25		
	R	48	-62	10	7.56		
Angular Gyrus	R	48	-76	34	7.27		
Dorsal Posterior Cingulate Cortex	L	-2	-42	40	7.78	<0.001	3505
	R/L	0	-20	44	6.53		
	R	2	-28	42	6.46		
	L	-6	-50	20	6.35		
Cerebellum (Pyramis)	L	-18	-84	-40	7.22	<0.001	356
	L	-34	-82	-44	3.41		
Cuneus	L	-10	-96	32	6.59	0.005	160
	L	-10	-102	20	6.15		
Orbitofrontal Gyrus	L	-28	30	-12	6.36	<0.001	251
	L	-36	30	-14	5.41		
Cerebellum (Tuber Cinereum)	R	16	-88	-40	6.1	<0.001	602
	R	38	-74	-36	4.88		
	R	46	-70	-40	4.86		
	R	26	-78	-32	4.67		

Cerebellum (Posterior Lobe)	R	6	-48	-44	5.82	0.007	148
	L	-4	-52	-48	5.56		
	R	4	-50	-52	4.78		
Temporal Pole	R	34	24	-34	5.79	<0.001	521
	R	42	16	-34	5.33		
	R	46	10	-24	4.49		
	R	36	14	-26	4.42		
Cuneus	R	18	-96	28	5.18	<0.001	278
	R	6	-86	28	4.76		
	R	16	-82	30	4.32		
	R	12	-76	34	3.64		
Cerebellum (Pyramis)	L	-46	-66	-42	5.1	0.002	179
	L	-44	-74	-42	4.92		
Precentral Gyrus	R	16	-34	70	5.07	0.006	154
	R	14	-26	80	4.81		
Middle Temporal Gyrus	L	-44	8	-36	4.9	0.005	158
	L	-44	0	-38	4.72		
	L	-40	16	-38	4.36		

Table S6: Easy Block vs Tapping MSIT							
Label	Side	x	y	z	Peak T-value	Cluster p-value (FWE-corr)	Cluster size (voxels)
<i>Activation</i>							
Cuneus	L	-20	-94	-4	10.79	<0.001	3081
Inferior Occipital Gyrus	L	-34	-84	-8	8.55		
Middle Occipital Gyrus	L	-40	-66	-16	6.72		
Cerebellum (Declive)	L	-34	-74	-22	5.32		
Cuneus	R	18	-92	-4	9.9	<0.001	2353
Inferior Occipital Gyrus	R	30	-86	-6	9.81		
Middle Occipital Gyrus	R	32	-96	0	9.06		
Inferior Occipital Gyrus	R	40	-82	-8	7.72		
<i>Deactivation</i>							
Superior Occipital Gyrus	R	38	-84	28	5.01	<0.001	189
Middle Temporal Gyrus	R	50	-76	14	4.83		

Table S7: Difficult Onset vs Tapping MSIT							
Label	Side	x	y	z	Peak T-value	Cluster p-value (FWE-corr)	Cluster size (voxels)
<i>Activation</i>							
Inferior Occipital Gyrus	R	42	-76	-10	12.94	<0.001	58279
Lingual Gyrus	L	-20	-92	-12	12.07		
Dorsal Premotor Cortex	L	-50	4	36	12.06		
Middle Occipital Gyrus	R	32	-94	-6	11.94		
<i>Deactivation</i>							
Dorsal Lateral Prefrontal Cortex	R	22	36	52	6.37	<0.001	215
	R	12	36	48	4.33		
Dorsal Lateral Prefrontal Cortex	L	-16	26	46	5.14	<0.001	269
	L	-22	36	46	4.97		
	L	-24	22	38	4.81		
	L	-20	30	40	4.64		
Angular Gyrus	L	-44	-68	30	4.87	0.003	149
	L	-56	-68	30	4.8		
	L	-44	-56	26	4.07		
	L	-54	-62	36	3.64		

Table S8: Easy Onset vs Tapping MSIT							
Label	Side	x	y	z	Peak T-value	Cluster p-value (FWE-corr)	Cluster size (voxels)
<i>Activation</i>							
Lingual Gyrus	L	-20	-92	-12	11.56	<0.001	11048
Inferior Occipital Gyrus	L	-42	-82	-10	11.32		
Middle Occipital Gyrus	R	32	-94	-6	10.99		
	L	-26	-92	0	10.62		
Intraparietal Sulcus	R	28	-66	40	8.85	<0.001	2050
	R	34	-50	36	6.92		
	R	34	-58	46	6.34		
	R	38	-42	36	6.18		
Intraparietal Sulcus	L	-46	-40	46	7.55	<0.001	1542
	L	-24	-64	36	7.42		
	L	-26	-50	40	6.58		

	L	-40	-42	38	6.37		
Cerebellum (Posterior Lobe)	R	22	-66	-46	6.79	0.004	135
	R	30	-70	-50	5.18		
	R	34	-64	-46	4.77		
	R	20	-74	-50	4.46		
Dorsal Premotor Cortex	R	44	20	26	6.19	<0.001	938
	R	50	28	30	5.87		
	R	48	12	20	5.1		
	R	44	8	30	4.99		
Dorsal Premotor Cortex	R	30	6	66	5.66	<0.001	546
	R	30	10	48	4.77		
	R	30	-4	48	4.68		
	R	26	10	60	4.63		
Orbitofrontal Gyrus	R	46	50	-12	5.19	<0.001	407
	R	22	60	-12	4.71		
	R	24	56	-2	4.63		
	R	20	42	-22	4.59		
Dorsal Premotor Cortex	L	-50	6	28	5.15	<0.001	417
	L	-38	6	26	5.02		
	L	-56	10	34	4.66		
	L	-42	6	34	4.54		
Superior Frontal Gyrus	R	4	16	48	5.06	0.008	119
	L	-4	12	50	3.57		
Orbitofrontal Gyrus	L	-36	56	-14	4.94	<0.001	479
Ventral Lateral Prefrontal Cortex	L	-48	42	16	4.86		
	L	-44	50	8	4.83		
	L	-52	36	22	4.43		
Dorsal Prefrontal Cortex	L	-30	-2	64	4.51	0.005	129
	L	-26	-6	72	4.1		
<i>Deactivation</i>							
Medial Prefrontal Cortex	L	-6	56	6	5.69	<0.001	824
	L	-8	58	24	5.22		
	L	-16	54	28	5.12		
	L	-8	64	14	5.04		
Subgenual Anterior Cingulate Cortex	R	4	28	-8	4.31	0.048	83
	R/L	0	38	-8	4.05		