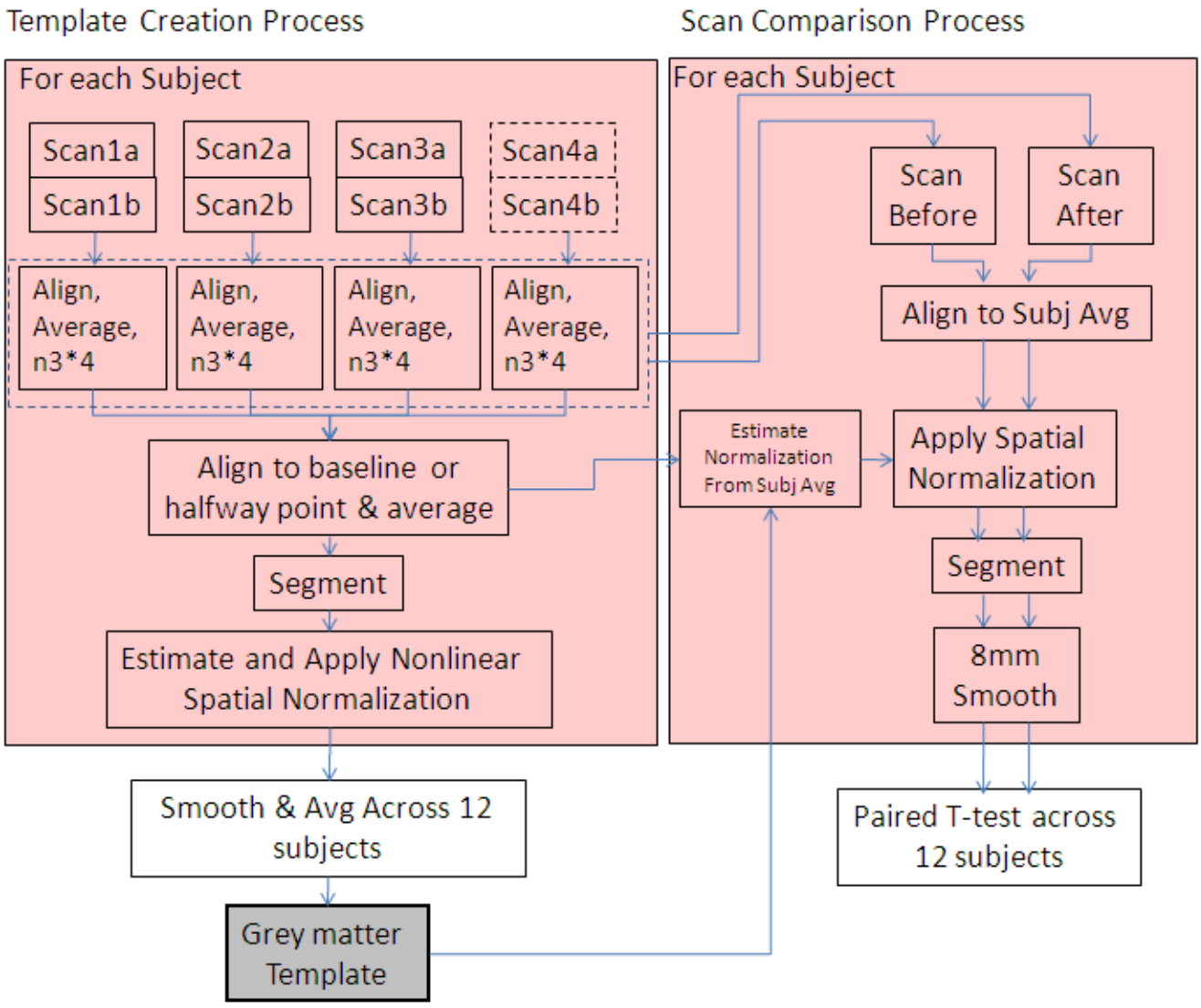
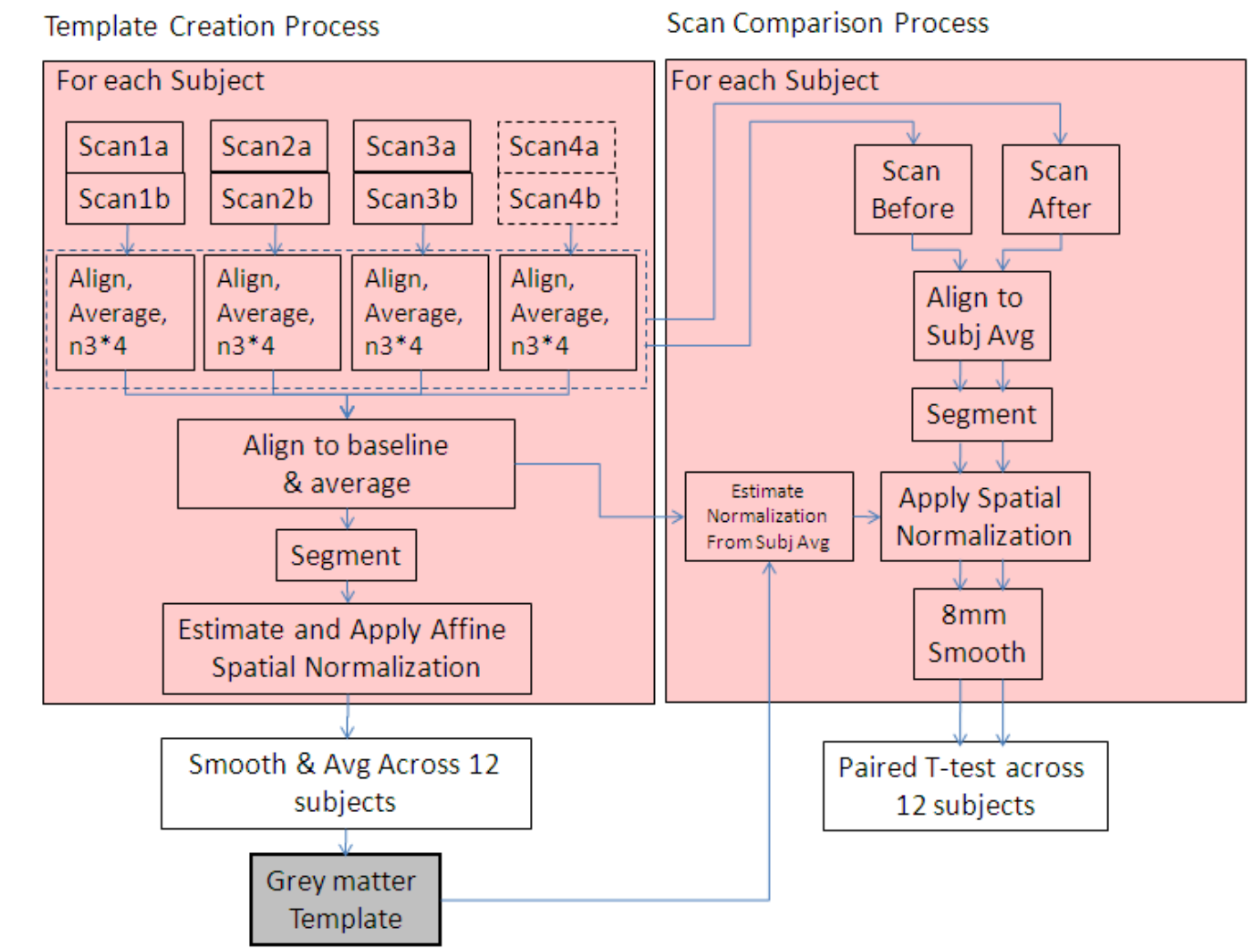
Supplemental Figure 1

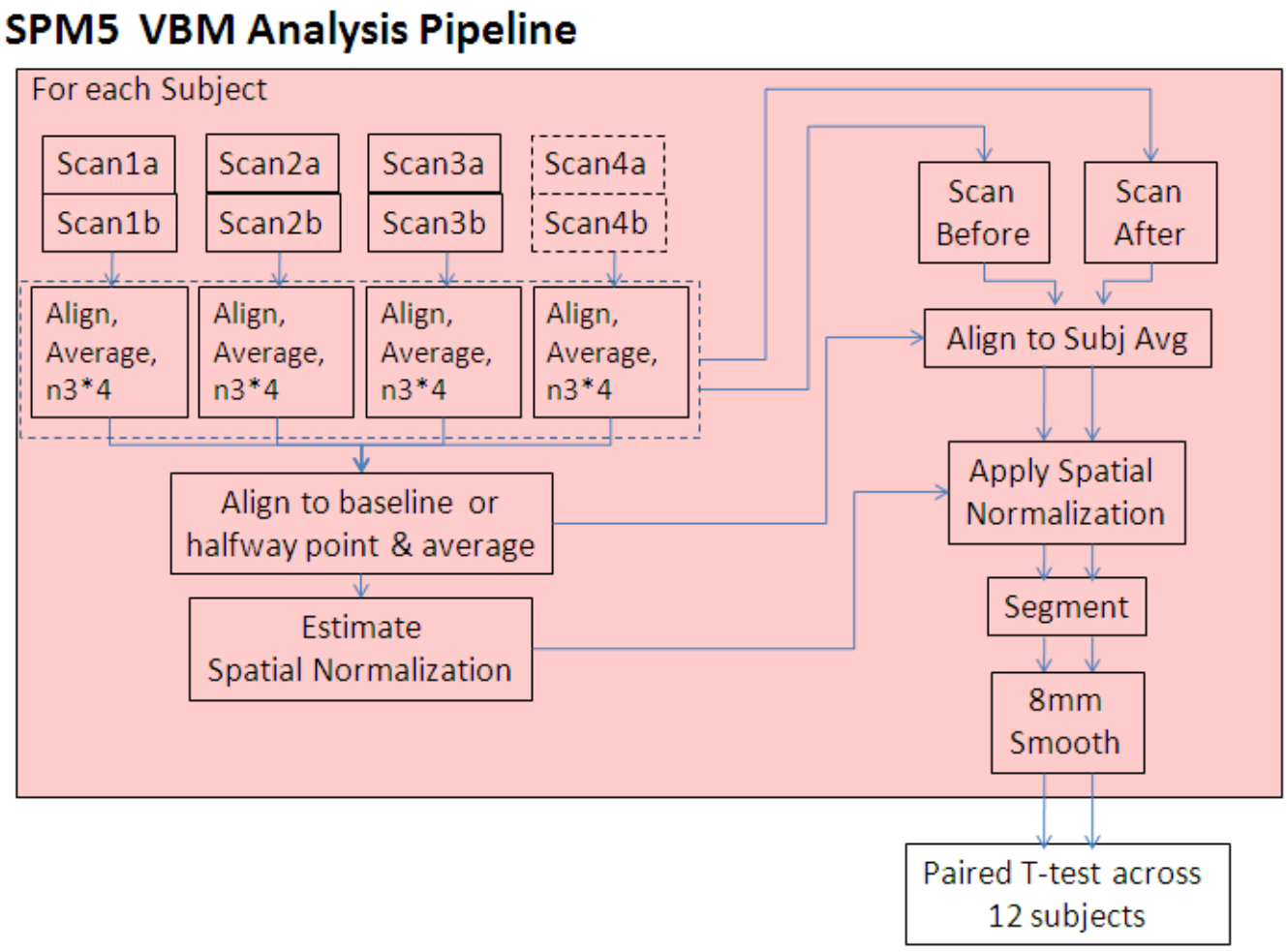
SPM2 VBM Analysis Pipeline



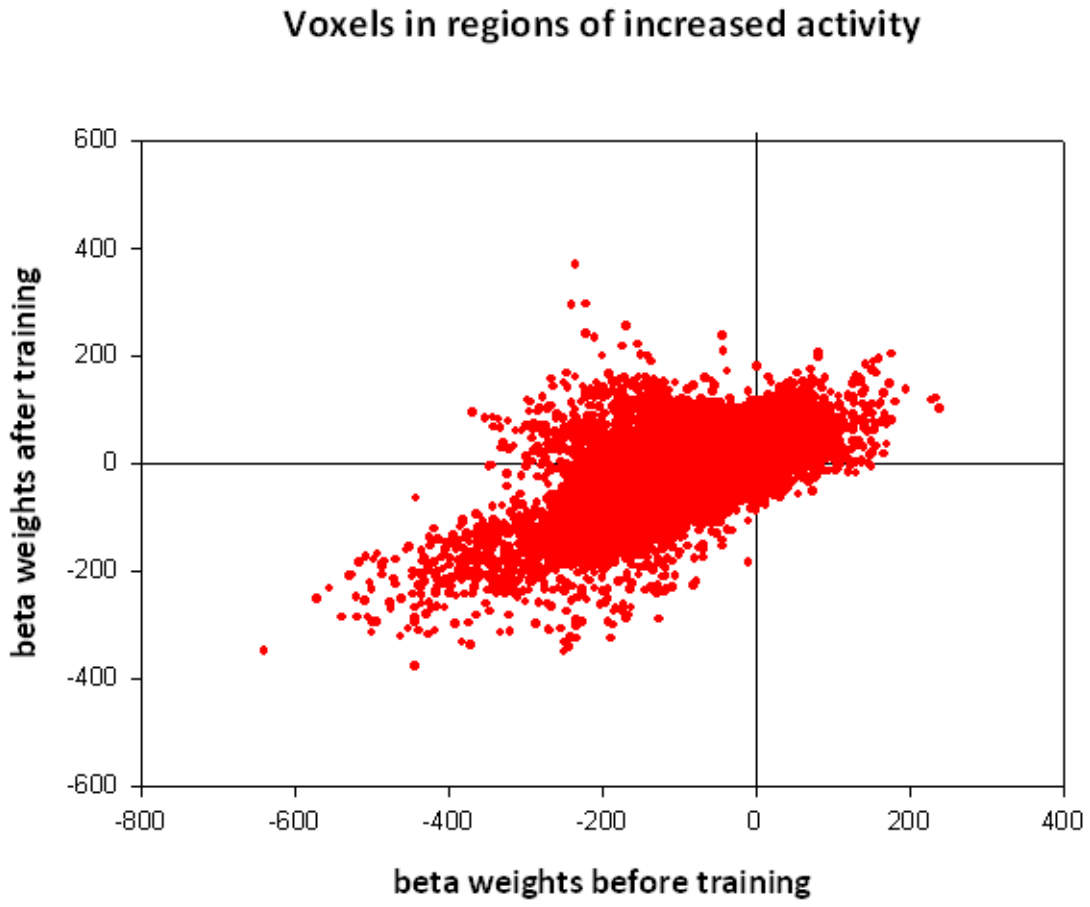
Supplemental Figure 2

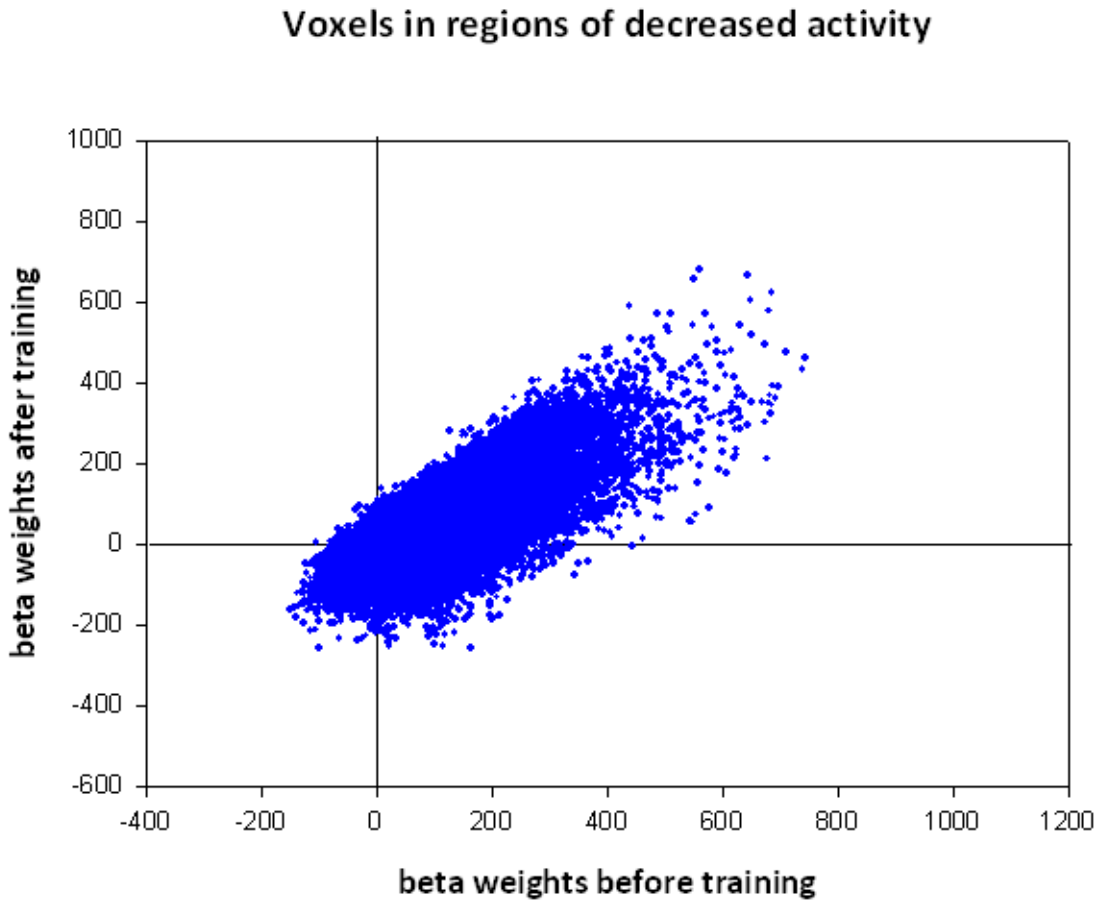


Supplemental Figure 3



Supplemental Figure 4





Supplemental Figure 4 Caption: The beta weights for all voxels from the first level analyses of each subject are plotted here. Beta weight before training are plotted against beta weights after training. Voxels in areas that showed a relative increase in the group analysis are plotted in top graph and voxels that showed a relative decrease in the group analysis are plotted in the bottom graph. It is apparent from the top graph that the majority of the voxels in areas of increased activation were deactivated relative to baseline before training (83.6%) and a large fraction (54%) remained deactivated after training. In contrast, most of the voxels in areas of decreased activation were primarily activated relative to baseline before (92.3%) and after (73.7%) training. Note that these graphs depict pre-selected voxels and are included for descriptive purposes only. No inferences may be drawn (Kriegeskorte et al., 2009, Nature Neuroscience).

Supplemental Table 1 - Clusters of Grey Matter Change

	Control Period						Learning Period					
	P-value	#voxels	x	y	z	Area	P-value	#voxels	x	y	z	Area
SPM2 - Aligned to Baseline Scan	**No Clusters**						0.004	394	-6	-67	-6	L. Primary Visual
							0.003	4	28	-13	65	R. Precentral Gyrus
SPM2- Aligned to Pretraining Scan	0.034	65	7	50	43	R. Medial Frontal	0.032	562	-20	-65	-51	L. Cerebellum
SPM2 - Aligned to Halfway Scan	**No Clusters**						**No Clusters**					
FSL - Aligned to Baseline Scan	0.005	308	-33	-33	-11	L. Hippocampus	0.0007	2790	0	33	29	Paracingulate Gyrus
	0.007	256	31	-40	-9	R. Lingual Gyrus	0.01	220	40	20	-6	R. Insula
	0.001	771	1	24	39	R. Paracingulate	0.03	109	3	-38	53	R. Precuneus
	0.02	135	0	49	12	L. Paracingulate	0.04	82	33	38	-18	R. Frontal Pole
	0.02	128	44	13	-4	R. Insula	0.04	75	-23	33	44	L. Sup. Frontal Gyrus
	0.04	83	1	-55	48	R. Precuneus						
FSL - Aligned to Halfway Scan	**No Clusters**						>0.0001	2	56	-8	-43	R. Inferior Temporal
FSL - with randomise 2.1	**No Clusters**						**No Clusters**					
SPM5	**No Clusters**						**No Clusters**					

Supplementary Table 1 Caption: P-values, sizes, coordinates and areas of each cluster found in each VBM analysis are provided. Clusters of grey matter increase are printed in red. Clusters of grey matter decrease are printed in blue. Voxel coordinates are reported in MNI space and area labels were determined using the Harvard-Oxford Structural Atlas in FSLview (Flitney et al., 2008). Note that all clusters reporter here were ultimately determined to be artifactual.