

Table S1. Voxel-wise comparisons of GMV with age, gender and whole brain volume as nuisance variables

Regions	Cluster P value (FWE corrected)	Voxels	T	MNI Coordinates (x, y, z)
DS < HC1				
Cerebellar Culmen	0.001	1316	5.68	6 -57 -22
DS < NDS				
Insula	0.009	786	4.64	-32 18 15

Table S2. Correlational analysis after controlling for age, gender and head size

	PANSS_T	PANSS_P	PANSS_N	PANSS_G	IQ
Culmen	-.067(.613)	.111(.399)	-.104(.431)	-.107(.414)	.256(.048)*
Insula	-.073(.577)	.215(.099)	-.332(.010)*	-.002(.990)	.022(.869)

Showed as r(P); * P<0.05.

Table S3. Correlational analysis results in NDS group

	PANSS_T	PANSS_P	PANSS_N	PANSS_G	IQ	DUP
Cerebellar	-.194(.208)	-.173(.262)	-.003(.983)	-.252(.099)	.193(.240)	.017(.913)
Culmen						
Insula	-.123(.428)	-.228(.137)	-.120(.439)	.041(.795)	.308(.056)	.153(.322)

Showed as r(P); *, P < .05.

Table S4. Correlational analysis results in DS group

	PANSS_T	PANSS_P	PANSS_N	PANSS_G	IQ	DUP
Cerebellar	.100(.519)	.066(.669)	.009(.954)	.120(.439)	.313(.099)	.136(.379)
Culmen						
Insula	.015(.923)	.075(.628)	-.044(.77)	.021(.891)	-.097(.610)	.204(.183)

Showed as r(P); *, P < .05.

Table S5. Brian regions showing significant effects of symptoms or DUP.

Regions	Voxels	Peak T value	MNI Coordinates (x, y, z)
DUP_negative*			
Precentral Gyrus	68	3.94	-51 12 10

PANSS-T_negative*

Superior Temporal Gyrus	619	4.41	-55	-6	-5
Medial Frontal Gyrus	83	4.08	18	26	45
Cerebellum Posterior Lobe	57	3.93	10	-60	-46
Middle Frontal Gyrus	64	3.68	28	29	48
Precentral Gyrus	55	3.61	-42	16	8

Aberrations: DUP, duration of untreated psychosis; PANSS-T, PANSS total scores.

*DUP_negative, brain regions showing negative correlations between DUP and GMV;

PANSS-T_negative, brain regions showing negative correlations between PANSS-T and GMV;

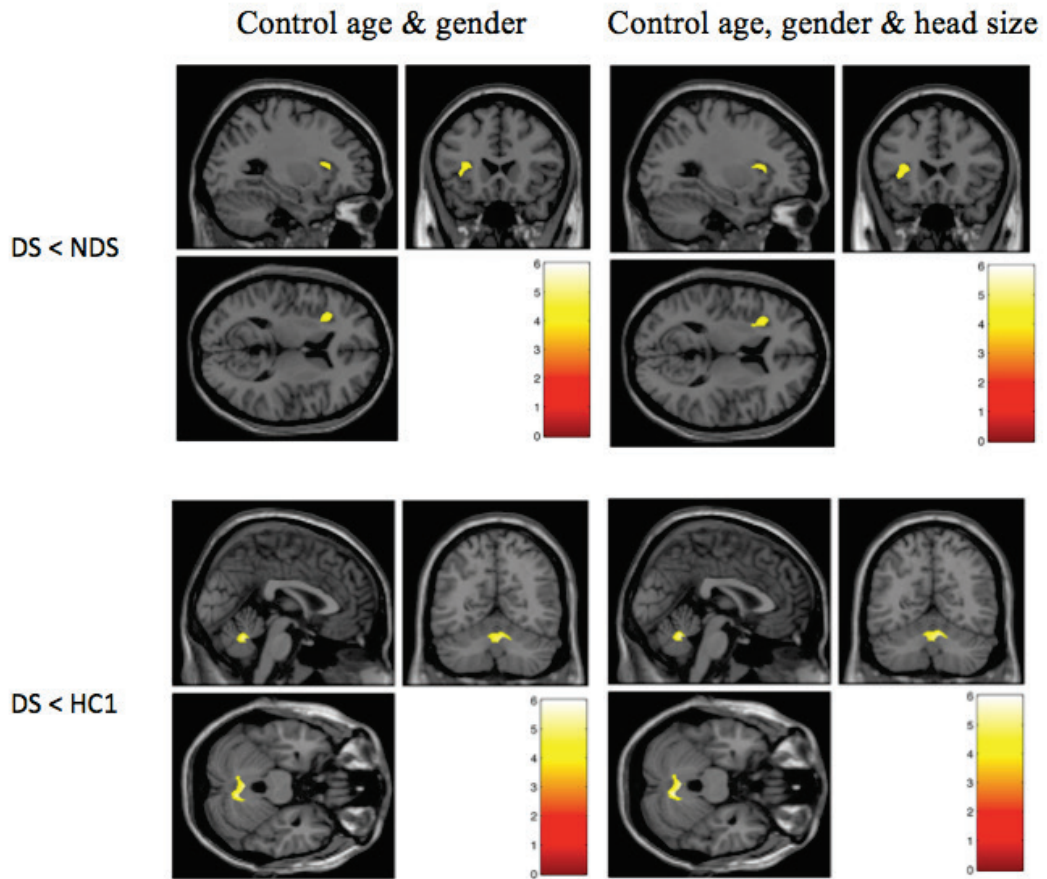


Figure S1. Effect of whole brain volume on the GMV differences between groups. Left panel shows the results of DS < NDS and DS < HC1 after controlling for the effect of age and gender; the right panel shows the results of the same contrasts after controlling for the effect of age, gender and WBV.