Sleep disturbance-related depressive symptom and brain volume reduction in shift-working nurses

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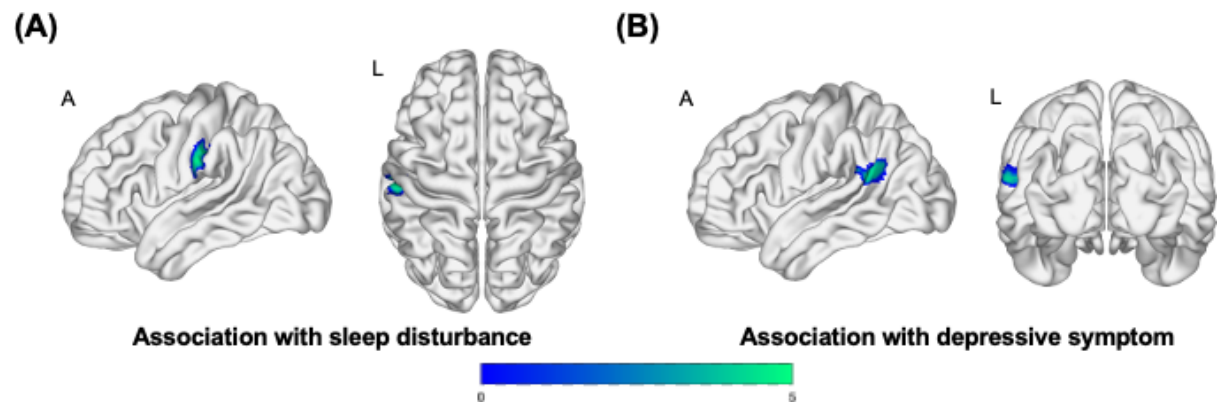
Supporting Figures and Tables

Figure S1. Statistically significant correlations of grey matter volume with (A) sleep disturbance and (B) depressive symptom. Clusters of statistically significant correlations apply to the left postcentral gyrus in (A) and the left superior temporal gyrus in (B). A, anterior; and L, left.
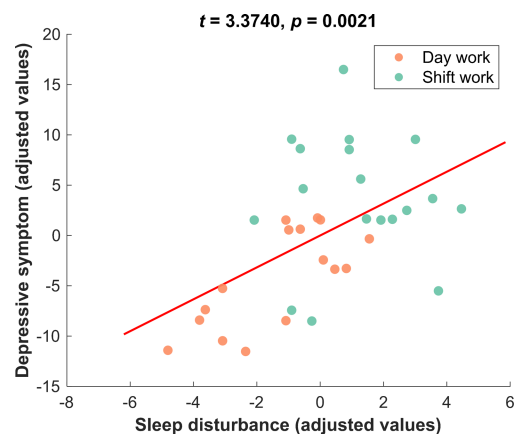
Figure S2. The association of sleep disturbance with depressive symptom. A line in red represents a statistically significant linear fit to data points.
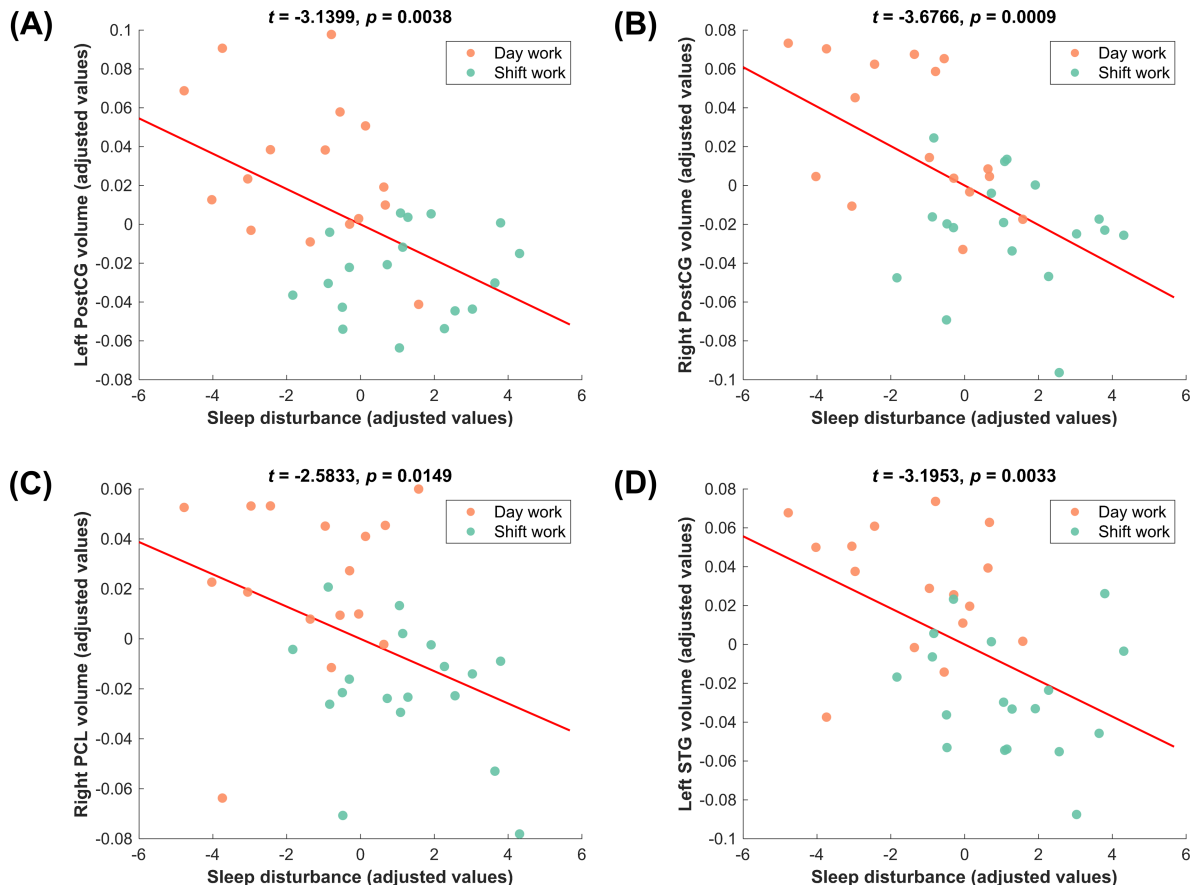
Figure S3. The association of sleep disturbance with (A) left postcentral gyrus (PostCG) volume, (B) right PostCG volume, (C) right paracentral lobule (PCL) volume, and (D) left superior temporal gyrus (STG) volume. A line in red represents a statistically significant linear fit to data points.
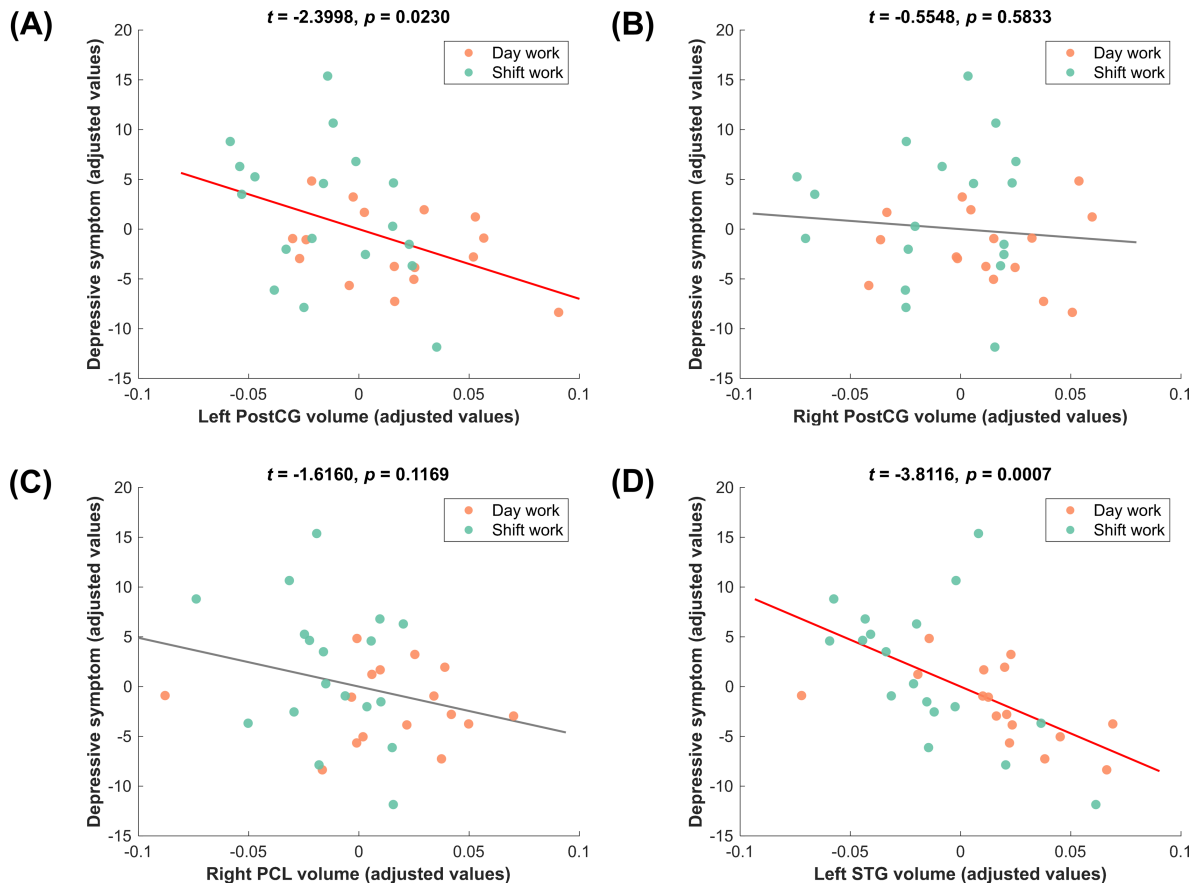
Figure S4. The association of (A) left postcentral gyrus (PostCG) volume, (B) right PostCG volume, (C) right paracentral lobule (PCL) volume, and (D) left superior temporal gyrus (STG) volume with depressive symptom, after adjusting for inter-individual differences in sleep disturbance. Lines in red and grey, respectively, represent statistically significant and non-significant linear fits to data points.

Table S1. Clusters of statistically significant correlations of grey matter volume with (A) sleep disturbance and (B) depressive symptom.

(A)

No	Extent (voxel count)	Brain region	Peak voxel		
			t value	p value	Coordinates (x, y, z in mm)
1	729	Left PostCG	5.7017	< 0.0001	-54, -15, 28

(B)

No	Extent (voxel count)	Brain region	Peak voxel		
			t value	p value	Coordinates (x, y, z in mm)
1	990	Left STG	5.8053	< 0.0001	-58, -51, 18

PostCG, postcentral gyrus; and STG, superior temporal gyrus.