

Table S2. Full regression model statistics for network MCS as a function of rWML. Network MCS was modeled using multiple variable linear regression for network of interest, incorporating network-specific regional-WML (rWML) as a predictor. Each model was adjusted for gray matter ratio (GMR), age, gender and race. Nine site variables were also originally included as adjusters but were not significant for these networks and removed from the final model.

Predictors	Network MCS									
	ASLN		DMN		LFP		pDMN		DFN	
	Beta	p value	Beta	p value	Beta	p value	Beta	p value	Beta	p value
rWML (network)	-7.76E-07	0.031203*	-6.45E-05	0.018288*	4.85E-05	2.49E-06*	-1.01E-06	1.46E-01	-9.54E-05	8.47E-03*
GMR	0.018818	0.427716	0.059246	0.005444*	0.032905	0.083277	0.018222	0.301413	0.031319	0.313213
Age	-7.54E-05	3.79E-01	-3.50E-05	6.47E-01	3.19E-05	6.37E-01	1.75E-05	7.82E-01	1.74E-04	1.20E-01
Gender	-0.00071	0.553057	0.000283	0.792913	-0.00154	0.106982	0.000384	0.666699	-0.00195	0.222156
Race (White)	0.004201	0.325152	-0.00587	0.127117	0.006036	0.077825	-0.00284	0.373754	0.010018	0.077783
Race (Black)	0.004019	0.356188	-0.00555	0.158339	0.006051	0.083163	-0.0063	0.053229	0.012485	0.031295*
Race (Hispanic)	0.007548	0.127305	-0.0027	0.545432	0.005371	0.175632	-0.00545	0.140286	0.013281	0.043663*

*p<0.05

ASLN – Auditory-Saliency-Language network; DMN – Default Mode Network; LFPN – Left Frontoparietal Network; pDMN – posterior DMN; DFN – Dorsal Frontal Network; rWML – regional white matter lesion volume (network specific); MCS – Mean connectivity score;