

Table S3. Full regression model statistics for network WCC as a function of rWML. Network WCC 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.

Predictors	Network WCC									
	ASLN		DMN		LFP		pDMN		DFN	
	Beta	p value	Beta	p value	Beta	p value	Beta	p value	Beta	p value
rWML (network)	-1.90E-05	3.48E-10*	-0.00163	3.22E-05*	0.000596	5.69E-06*	-4.78E-05	1.55E-04*	-1.26E-03	8.54E-06*
GMR	-0.028	0.886909	0.114997	0.70501	0.232886	0.336177	-0.27064	0.397332	0.302898	0.210073
Age	-1.59E-03	2.56E-02*	1.34E-03	2.21E-01	-6.20E-04	4.72E-01	-3.20E-04	7.81E-01	2.06E-03	1.83E-02*
Gender	-0.01657	0.094779	-0.00361	0.814431	0.006195	0.611722	0.008521	0.598403	-0.0069	0.578371
Race (White)	0.028409	0.422737	0.015648	0.775956	-0.02212	0.611961	-0.02032	0.725319	0.080428	0.06879
Race (Black)	0.028027	0.438165	0.035805	0.523906	-0.03507	0.430757	-0.03452	0.558545	0.10648	0.018294*
Race (Hispanic)	0.071487	0.081979	0.088369	0.165997	-0.08399	0.096952	-0.0183	0.78478	0.116277	0.023258

*p<0.05 for FC metric

ASLN – Auditory-Saliency-Language network; DMN – Default Mode Network; LFPN – Left Frontoparietal Network; rWML – regional white matter lesion volume (network specific); WCC – WML-related cluster connectivity