

Supplementary Table 1. Linear regressions with global white matter alterations (PSMD)**in the single task**

Regressor Single task	β	$P_{\text{uncorr.}}$	$P_{\text{corr.}}$	$R^2_{\text{adj.}}$ [%]
Pace				
Vel	-0.176	0.01	0.09	13.7
Cad	-0.148	0.08	0.65	5.5
SLen	-0.207	0.00	0.03*	18.0
Rhythm				
DSupp	-0.185	0.08	0.62	5.7
Swing	-0.190	0.33	1.00	0.0
Variability				
STime CV	-0.273	0.03	0.24	9.7
SLen CV	-0.192	0.04	0.22	8.5
BoS CV	-0.027	0.84	1.00	0.0

* $P_{\text{corr.}} < 0.05$; Linear regressions corrected for leg length.

BoS CV, base of support variability; Cad, cadence; DSupp, double support; SLen, stride length; SLen CV, stride length variability; STime CV, stride time variability; Swing, swing phase; Vel, velocity.