Supplemental Table 1: Brain regions of interest and their associations with self-reported energy/fatigue and/or Mild Parkinsonian Signs

Regions of Interest	Energy	MPS	References (Energy)	References (MPS)
Basal ganglia	✓✓✓✓	✓ ✗	Chaudhuri, 2000; Li, 2017; Wasson, 2019; Chaudhuri, 2004	Camarda, 2018; Rosano, 2012
Caudate	✓ ✗	✓	Kluger, 2019; Niccolini, 2019	Camarda, 2018
Putamen	✓ ✓ ✗ ✓		Kluger, 2019 ; Tessitore, 2016; Niccolini, 2019; Wasson, 2019	
Prefrontal cortex	✓ ✗ ✓ ✓	✓✓	Li, 2017; Kluger, 2019; Tessitore, 2016; Carvalho, 2017	Camarda, 2018 ; de Laat, 2012; Rosano, 2008
Motor cortex	✓	✓✓	Li, 2017	Rosano, 2012; Rosano, 2008
Substantia nigra	✓	✓✓✓ ✓	Solupchuk, 2018	Mahlknecht, 2020 ; Lerche, 2015 ; Buchman, 2012; Ross, 2004
Hippocampus	✗ ✗ ✓ ✓	✗ ✓	Niccolini, 2019; Kang 2020; Wasson, 2019; Carvalho, 2017	Louis, 2008
Cingulate cortex	✗ ✗ ✓		Li, 2017; Kluger, 2019; Tessitore, 2016	
Thalamus	✓✓✓	✗	Chaudhuri, 2004; Niccolini, 2019; Kang 2020	Rosano, 2012
Insula	✗		Kluger, 2019	
Amygdala	✗✓		Niccolini, 2019; Wasson, 2019	
Nucleus accumbens	✗		Niccolini, 2019	
Pre and post central gyri	✓	✓	Li, 2017	Rosano, 2012
Limbic system	✓✓	✓	Chaudhuri, 2004; Wasson, 2019	Rosano, 2012

Supplementary Table 2. Associations of the slope of energy with MPS in those free of dementia (n=278)

	Model 1: unadjusted	Model 2: Adjusted for age	Model 3: Model 2 + fatigue	Model 4: Model 3 + Baseline SEL	Model 5: Model 4 + WMH	Model 6: Model 5+right striatum+ normalized total gray matter volume	Model 7: model 6 + disease conditions affecting MPS
	Unadjusted OR (95% CI)	Adjusted OR (95% CI)					
SEL slopes	2.04 (1.23, 3.39)	2.03 (1.22, 3.38)	1.88 (1.11, 3.17)	1.88 (1.12, 3.16)	1.92 (1.13, 3.24)	2.11 (1.23, 3.63)	2.17 (1.25, 3.77)

Note. SEL=self-reported energy level. WMH=white matter hyperintensities. Model 2-7 adjusted for covariates that were bivariately associated with MPS (i.e. age; refer to Table 1). In model 7, diseases included the prevalence of cardiovascular disease, stroke, myocardial infarction, and diabetes. Due to small values, the slope of energy was multiplied by 10 for interpretation purposes. The sign of slope was reversed with higher values indicating a greater decline in SEL