

Measure	Baseline Performance	Change in Performance
Visual Sensory		
NVA	108.9 (34.7, 183.2)**	-82.5 (-179.1, 14.0)
FVA	46.5 (-30.4, 123.5)	50.0 (-15.7, 115.7)
CS	-42.9 (-92.0, 6.1)	31.6 (-21.8, 85.0)
Visual Perception		
Attention UFOV	0.0252 (-0.0141, 0.0646)	0.0583 (0.0193, 0.0974)**
Spatial JLO	-1.17 (-3.16, 0.82)	-0.93 (-3.42, 1.55)
Motion SFM	1.26 (-0.91, 3.43)	-0.04 (-2.60, 2.51)
Visuospatial Construction		
BLOCKS	-0.22 (-1.16, 0.72)	-0.79 (-1.97, 0.39)
CFT-Copy	-1.40 (-3.66, 0.87)	0.43 (-1.48, 2.34)
Memory		
Visual CFT-Recall	0.81 (-0.81, 2.44)	-0.23 (-1.84, 1.38)
Visual BVRT-error	0.01 (-2.90, 2.92)	3.33 (1.14, 5.52)**
Verbal AVLT Recall	0.02 (-2.20, 2.25)	0.28 (-4.39, 4.95)
Executive Functions		
Set Shifting TMT(B-A)	0.25 (-0.14, 0.64)	0.196 (0.050, 0.342)*
Fluency COWA	-0.30 (-1.15, 0.56)	-0.55 (-1.35, 0.26)
General Cognition		
MMSE	-3.03 (-9.22, 3.16)	-1.30 (-5.20, 2.60)
COGSTAT	-0.062 (-0.239, 0.115)	-0.373 (-0.565, -0.181)***
Sleepiness ESS	1.41 (-0.23, 3.04)	-0.59 (-2.49, 1.31)
Depression GDS	0.69 (-1.29, 2.67)	0.40 (-2.01, 2.80)
Apathy present	1.97 (-19.1, 23.1)	
Balance Functional Reach	1.05 (-2.05, 4.16)	1.63 (-1.29, 4.54)
Parkinsonism		
Duration	0.34 (-0.44, 2.11)	NA
Hoehn-Yahr	1.6 (-14.7, 17.8)	0.1 (-10.4, 10.6)
ADL-UPDRS	1.58 (-1.48, 4.64)	2.33 (0.82, 3.84)**
Motor-UPDRS	-0.005 (-0.947, 0.937)	0.080 (-0.762, 0.922)
Schwab-England		0.22 (-0.29, 0.73)
Levodopa/day	-0.0014 (-0.0178, 0.0151)	-0.0083 (-0.0540, 0.0373)
Dopamine agonist use	6.04 (-11.23, 23.34)	
Baseline Driving Features		
Crash within 1 year	10.3 (-14.0, 34.5)	
Vehicle speed (mph)	1.36 (0.11, 2.62)*	

Table e-1. Regression coefficients for the baseline value and change in each variable in predicting final total road error counts after 2 year follow up within the PD group, while controlling for age, education, and baseline total error counts. Values represent the number of road error counts at 2-year follow up accounted for by 1 unit change in the predictors. For example, a 10-second prolongation (worsening) of the TMT(B-A) performance at follow-up resulted in an additional 1.96 (0.50, 3.42) errors at 2-year follow up, while a 100-millisecond prolongation (worsening) of UFOV at follow-up resulted in an additional 4.8 (1.9, 9.7) errors at follow up. *p<0.05, **p<0.01, ***p<0.001