

Supplementary Information for

Double dissociation of single-interval and rhythmic temporal prediction in cerebellar degeneration and Parkinson's disease

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Tables S1 Figure S1

Table S1. Results of ANOVAs conducted within each group, and of ANOVAs conducted to compare each patient group with its matched control group.

Within group	Experimental factor	CD patients				CD-matched controls				
		Df	F	p	η_p^2	df	F	p	η_p^2	
	Condition	2,20	5.04	0.017*	0.34	2,20	19.73	2×10 ⁻⁵ *	0.66	
	Target Interval	1,10	2.76	0.13	0.22	1,10	9.48	0.012*	0.49	
	Condition X Target Interval	2,20	0.01	0.97	0.001	2,20	0.26	0.78	0.03	
CD versus CD-matched	Experimental factor	Df	F	p	η_p^2					
	Group	1,20	24.42	7×10 ⁻⁵ *	0.55					
	Condition	2,40	17.46	4×10 ⁻⁶ *	0.47					
	Group X Condition	2,40	3.88	0.029*	0.16					
								PD-matched controls		
			PD ₁	patients]	PD-match	ed controls		
Within group	Experimental factor	Df	PD ₁	patients p	η_p^2	l	PD-match	ed controls	η_p^2	
Within group	Experimental factor Condition	Df 2,22			η_p^2 0.36	-				
Within group			F	p		df	F	p	η_p^2	
Within group	Condition	2,22	<i>F</i> 6.1	p 0.02*	0.36	df 2,22	F 21.41	<i>p</i> 7×10 ⁻⁶ *	η_p^2 0.66	
Within group PD versus PD-matched	Condition Target Interval	2,22 1,11	<i>F</i> 6.1 8.39	p 0.02* 0.02*	0.36 0.22	df 2,22 1,11	F 21.41 11.02	p 7×10 ^{-6*} 0.007*		
PD versus	Condition Target Interval Condition X Target Interval	2,22 1,11 2,22	F 6.1 8.39 2.04	p 0.02* 0.02* 0.15	0.36 0.22 0.16	df 2,22 1,11	F 21.41 11.02	p 7×10 ^{-6*} 0.007*		
PD versus	Condition Target Interval Condition X Target Interval Experimental factor	2,22 1,11 2,22 <i>Df</i>	F 6.1 8.39 2.04	p 0.02* 0.02* 0.15	0.36 0.22 0.16 η_p^2	df 2,22 1,11	F 21.41 11.02	p 7×10 ^{-6*} 0.007*		

df = degrees of freedom, F = ANOVA F statistic, p = p value for the effect of the respective experimental factor. Significant effects are marked with an asterisk. η_p^2 = partial eta squared.

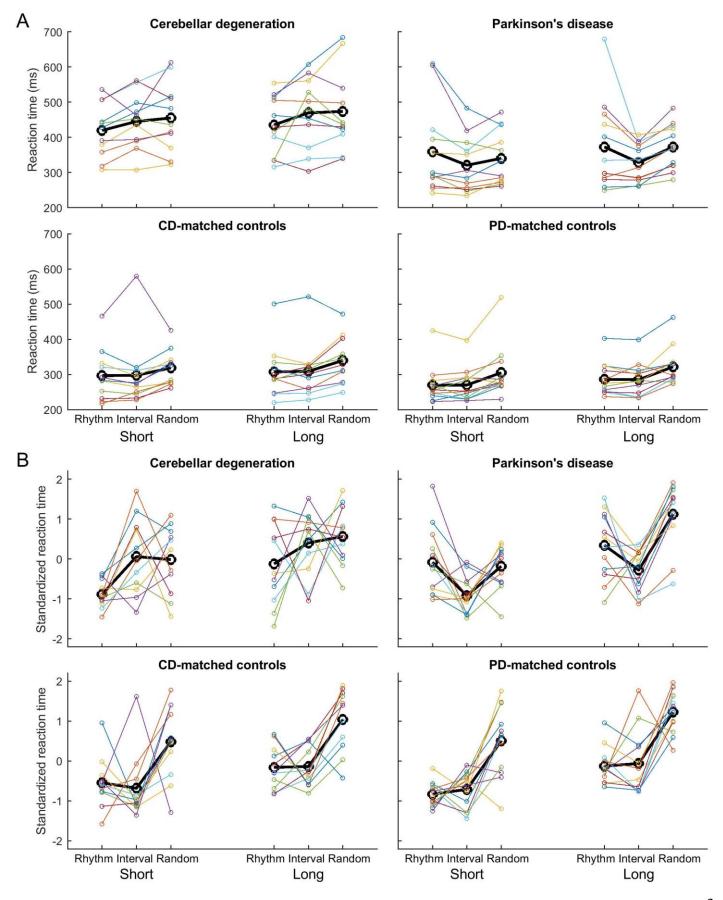


Figure S1. Individual participant data. (A) Mean reaction times for each participant (thin colored lines) and the group average (thick black line) in each of the three experimental conditions (Rhythm, Single Interval, Random) for targets appearing at the short or long interval. (B) The same data as in (A) but standardized for each participant (thin lines) or group (thick line) by subtracting the mean across all trials from the mean for a given condition, and dividing this difference by the standard deviation across all trials. This transformation eliminates differences in overall RT and within-participant variance. In both panels, calculations were performed after rejecting outlier trials (see Materials and Methods).