

Supplementary table 3. Statistical details of acoustic analysis for emotional conveyance sentences

Part A. Descriptives

	PD			CP		
	Male	Female	All	Male	Female	All
Intensity H	61.71 (5.21)	65.22 (3.61)	63.12 (4.86)	66.55 (2.43)	64.49 (3.57)	65.21 (3.30)
Mean F ₀ H	168.98 (35.75)	204.39 (28.97)	183.15 (36.96)	155.97 (12.36)	240.15 (28.59)	210.69 (47.56)
SD of F ₀ H	35.63 (14.04)	43.97 (12.16)	38.96 (13.64)	35.70 (11.54) _a	63.40 (15.94)	55.16 (18.57)
Speech rate H	4.33 (0.63)	4.18 (0.51)	4.27 (0.57)	4.90 (0.49)	3.90 (0.38)	4.25 (0.63)
Adjusted speech rate H	4.46 (0.57)	4.19 (0.51)	4.35 (0.55)	4.91 (0.49)	3.91 (0.38)	4.26 (0.64)
Pause H	0.00 (4.53) _a	0.00 (0.00) _a	0.00 (3.00) _a	0.00 (0.00) _a	0.00 (0.00) _a	0.00 (0.00) _a
Intensity N	58.83 (5.33)	60.96 (4.45)	59.68 (4.99)	61.77 (3.46)	60.09 (4.28)	60.68 (4.00)
Mean F ₀ N	132.84 (19.30)	172.90 (30.85)	148.86 (31.17)	117.66 (13.49)	186.46 (18.23)	162.38 (37.43)
SD of F ₀ N	18.50 (5.59) _a	29.67 (13.02)	20.82 (9.83) _a	27.19 (4.31)	34.60 (9.35)	32.01 (8.62)
Speech rate N	4.45 (0.73)	4.60 (0.65)	4.51 (4.46)	4.77 (0.55)	4.21 (0.28)	4.41 (0.47)
Adjusted speech rate N	4.53 (0.67)	4.62 (0.63)	4.57 (0.64)	4.82 (0.54)	4.22 (0.27)	4.38 (0.47) _a
Pause N	0.00 (1.62) _a	0.00 (0.00) _a	0.00 (0.82) _a	0.00 (1.14) _a	0.00 (0.00) _a	0.00 (0.00) _a
Intensity S	57.81 (6.19)	62.15 (3.69)	59.55 (5.65)	62.78 (2.50)	59.88 (4.88)	60.89 (4.36)
Mean F ₀ S	133.00 (27.26)	172.45 (33.36)	148.78 (35.12)	116.04 (15.11)	186.91 (25.09)	162.10 (40.90)
SD of F ₀ S	17.83 (8.95) _a	31.64 (9.71)	25.29 (12.06)	23.86 (5.39)	34.60 (11.02)	30.85 (10.65)

Speech rate S	4.00 (0.74)	3.79 (0.56)	3.92 (0.66)	4.03 (0.64)	3.40 (0.44)	3.62 (0.59)
Adjusted speech rate S	4.02 (0.73)	3.80 (0.56)	3.93 (0.66)	4.03 (0.64)	3.41 (0.44)	3.63 (0.59)
Pause S	0.00 (NA)	0.00 (0.53)a	0.00 (0.00)a	0.00 (NA)	0.00 (0.56)a	0.00 (0.00)a

Descriptives are shown as mean (SD), unless marked with 'a' in which case they refer to median (IQR). H = happy mood, N = neutral mood, S = sad mood.

PD = people with Parkinson's disease, CP = conversation partner controls, F₀ = fundamental frequency.

Part B. Mean differences associated with predictors

	Group	Gender	Group * Gender	MoCA	Mood (N-H)	Mood (S-H)	Gender * Mood (N-H)	Gender * Mood (S-H)	MoCA * Mood (N-H)	MoCA * Mood (S-H)	Group * Mood (N-H)	Group * Mood (S-H)
Intensity	4.83*	-3.49?	5.54*	1.86	-3.23 ***	-3.58 ***	-0.52	0.02	-1.59	-1.25	-0.97	-0.76
Mean F₀	-6.43	41.47** *	36.32**	17.27	-32.24 ***	-32.60 ***	-5.10	-4.41	-12.09	-19.34	-12.75	-13.12
SD of F₀	9.91*	13.58** *	4.44	4.06	-12.03 ***	-11.65 ***	-7.29	-5.08	-7.28	-7.22	-6.37	-9.36*
Speech rate	0.47?	-0.24	-0.66*	0.65*	0.09	-0.42 ***	0.37*	0.15	0.01	-0.21	-0.17	-0.32*
Adjusted speech rate	0.38	-0.32	-0.61*	0.56*	0.07	-0.51 ***	0.37*	0.21	0.03	-0.11	-0.13	-0.26
Pause	-2.03*	-1.85*	0.99	-2.07	-1.27*	-2.56 ***	0.64	1.78*	0.92	1.76	1.14	1.49?

F₀ = fundamental frequency, MoCA = Montreal Cognitive Assessment, H = happy mood, N = neutral mood, S = sad mood. * = p<0.05, ** = p<0.01, *** = p<0.001, ? = 0.05 < p <0.1.