

Table S9

Parkinson's disease: Study Design Details and Participant Characteristics for Masking Noise/SpeechVive™ as a Treatment Modality

Source	N	Study design	Sex (% female)	Age range (years)	Dysarthria type	Inclusion/exclusion criteria	Inferential statistics	Power analysis	Control group	Baseline data collected	Control intervention	Number of treatment sessions	Mode of treatment delivery	Home exercise plan	Patient-reported outcomes	Treatment effect size
Coutinho et al. (2009)	26	Prospective, quasi-experimental	42.00%	40-86	NR	Inclusion: <ul style="list-style-type: none"> • Hoehn & Yahr stage II • No more than moderate hearing loss • Mild or moderate dysphonia per GRBAS scale • No laryngeal comorbidities (e.g., Reinke's edema, reflux) Exclusion: <ul style="list-style-type: none"> • Language impairment • Parkinson-plus syndromes 	Yes	No	No	No	Yes	1	In person, individual	No	No	No
Quedas et al. (2007)	17	Prospective, quasi-experimental	52.90%	NR	NR	Inclusion 1, 2, 3: <ul style="list-style-type: none"> • GRBAS score 0 or 1 for level of dysphonia • Language impairment score 0 or 1 per Webster scale of PD disability • Hoehn & Yahr stage I-II • Levodopa therapy • Age 60-75 	Yes	No	Yes	No	No	1	In person, individual	No	No	No
Richardson et al. (2014)	10	Prospective, quasi-experimental	20.00%	68-86	NR	Inclusion 1, 2, 4: <ul style="list-style-type: none"> • Hypophonia per SLP • Unaided hearing in at least one ear 	Yes	No	No	Yes – multiple baselines	No	2-8 hours wearing SpeechVive device + 30 mins reading aloud, 5 days p/week for 8 weeks	In person, individual	Yes	No	No

Sadagopan & Huber (2007)	14	Prospective, quasi-experimental	35.70%	51-90	NR	Inclusion 3: <ul style="list-style-type: none"> • Living independently in the community • Ambulatory • Normal cognition per MMSE 	Yes	No	Yes	No	No	1	In person, individual	No	No	Yes
Stathopoulos et al. (2014)	33	Prospective, quasi-experimental	18.10%	47-83	Hypokinetic	Inclusion 1, 2, 4: <ul style="list-style-type: none"> • Hypophonia per SLP • No respiratory comorbidities • No history of head/neck/chest surgery (except for DBS) • No smoking in past 5 years • Unaided hearing in at least one ear 	Yes	No	No	Yes – single baseline	Yes	1	In person, individual	No	No	No

Note. PD, Parkinson's disease. SLP, Speech-language Pathologist. DBS, Deep Brain Stimulation. NR, not reported. MMSE, Mini-Mental State Examination. Inclusion criteria: ¹Parkinson's disease; ²No other neurological comorbidity than Parkinson's disease, ³Normal hearing acuity, ⁴Speaker of standard American English.