

## Supplemental Material S1. Descriptive statistics for the normal control group stratified by outcome measurement and condition.

### Normal Control (N=5)

	Listener Ratings				Avg CPPS				Vocal Effort			
	Obs.	Mean $\pm$ SD	Median	Min, Max	Obs.	Mean $\pm$ SD	Median	Min, Max	Obs.	Mean $\pm$ SD	Median	Min, Max
Control 1												
Sustained Phonation					10	16.9 $\pm$ 2.4	18.1	12.1, 19.3				
Voice loaded	Referent for paired comparison paradigm				29	11.8 $\pm$ 2.3	11.6	7.7, 15.3	5	13.1 $\pm$ 21.3	0	0, 49
Voiceless loaded					29	8.7 $\pm$ 1.5	8.4	6.2, 11.5				
Control 2												
Sustained Phonation	65	1.5 $\pm$ 20	0	-54, 50	10	17.3 $\pm$ 2.4	17.3	13.6, 21.5				
Voice loaded	96	-3.6 $\pm$ 13.4	0	-46, 50	30	11.7 $\pm$ 2.2	11.2	8.1, 15.3	5	11.2 $\pm$ 25	0	0, 56
Voiceless loaded	93	-0.2 $\pm$ 16.3	0	-46, 46	30	8.5 $\pm$ 1.2	8.4	6.2, 11				
DAF												
Sustained Phonation	65	3.4 $\pm$ 19.1	0	-64, 54	10	17.3 $\pm$ 2.8	17.5	12.9, 21.7				
Voice loaded	96	-9.5 $\pm$ 19.1	0	-70, 30	30	12.4 $\pm$ 2.2	12.3	8.8, 15.9	5	17.4 $\pm$ 16.6	23.5	0, 36.5
Voiceless loaded	93	-8.5 $\pm$ 20.4	0	-94, 42	30	9.7 $\pm$ 1.4	9.4	7.6, 12.7				
VTS												
Sustained Phonation	62	-4.7 $\pm$ 22.4	0	-54, 46	10	15.3 $\pm$ 1.8	15.1	13, 18.5				
Voice loaded	93	-0.6 $\pm$ 11.0	0	-38, 38	30	10.6 $\pm$ 1.8	10.4	7, 14	5	20 $\pm$ 19.3	23	0, 39.5
Voiceless loaded	93	-1.2 $\pm$ 15.2	0	-48, 46	30	8.0 $\pm$ 1.0	8.0	6.2, 9.8				
ENDO - A												
Sustained Phonation	65	-2.1 $\pm$ 20.7	0	-50, 46	10	15.4 $\pm$ 1.3	15.3	13.3, 18.1				
Voice loaded	93	-0.04 $\pm$ 15.2	0	-44, 56	30	11.8 $\pm$ 2.1	11.5	8.6, 15.1	5	16.7 $\pm$ 17	16.5	0, 37.5
Voiceless loaded	93	-2.2 $\pm$ 17.5	0	-44, 68	30	8.8 $\pm$ 1.5	8.7	6.6, 12.7				
ENDO + A												
Sustained Phonation	62	-2.6 $\pm$ 25.9	0	-90, 46	10	16.1 $\pm$ 2.8	16.6	11.4, 20.5				
Voice loaded	93	-4.5 $\pm$ 15.3	0	-74, 40	30	11.7 $\pm$ 2.3	10.8	7.8, 15.4	5	14.9 $\pm$ 10.9	15.5	0, 26
Voiceless loaded	96	-5.4 $\pm$ 18.0	0	-56, 54	30	8.6 $\pm$ 1.4	8.4	6.4, 11.5				