

**Supplemental Material S1.** Results for the talker voice analysis.

Talkers	Young women		Older women		Young men		Older men	
	Our data (Mean ± SD)	Normative data (Mean ± SD)	Our data (Mean ± SD)	Normative data (Mean ± SD)	Our data (Mean ± SD)	Normative data (Mean ± SD)	Our data (Mean ± SD)	Normative data <sup>1</sup> (Mean ± SD)
Age (range)	33.8 (19–47)	18.9 (18–27)	60.2 (51–68)	71.1 (63–82)	34.2 (20–48)	19.4 (18–28)	60.3 (51–75)	73.3 (65–86)
Voice fundamental frequency (sustained /a/, Hz)	187 ± 25	251 ± 28	172 ± 31	211 ± 42	102 ± 13	128 ± 21	108 ± 21	127 ± 27
Voice relative jitter (%)	0.005 ± 0.002	0.37 ± 0.25	0.005 ± 0.001	0.47 ± 0.34	0.005 ± 0.001	0.38 ± 0.13	0.007 ± 0.004	0.48 ± 0.2
Voice shimmer (dB)	0.04 ± 0.01	0.21 ± 0.12	0.04 ± 0.02	0.25 ± 0.16	0.04 ± 0.02	0.24 ± 0.09	0.06 ± 0.03	0.37 ± 0.19
Speech fundamental frequency (Hertz)	200 ± 20	208 ± 19	188 ± 38	174 ± 22	112 ± 12	118 ± 17	116 ± 23	116 ± 16

<sup>1</sup>Goy, Fernandes, Pichora-Fuller, and van Lieshout (2013) normative data are indicated for controlled voice amplitude at 75 dB SPL, which explains the lower voice f0 data observed here.

Goy, H., Fernandes, D. N., Pichora-Fuller, M. K., & van Lieshout, P. (2013). Normative voice data for younger and older adults. *Journal of Voice*, 27(5), 545–555. <https://doi.org/10.1016/j.jvoice.2013.03.002>