**Appendix A** Means and standard deviations (SD) of observed voice and speech measures

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| Measure | HDD | PC | TEL | IPH |
| Mean *f0* (Hz) | 176 (61) | 177 (62) | 176 (57) | 176 (61) |
| *f0* range (Hz) | 29 (28) | 45 (46) | 38 (54) | 35 (33) |
| Standard deviation of *F0* (Hz) | 3.4 (2.5) | 7.8 (15.3) | 7.9 (15. 08) | 3.2 (3.7) |
| % jitter | 1.75 (1.13) | 1.62 (1.17) | 1.08 (1.24) | 1.31 (1.02) |
| % shimmer | 4.10 (1.76) | 7.85 (3.6) | 6.06 (3.26) | 5.62 (2.70) |
| Noise-to-harmonic ratio | .15 (.04) | .28 (.27) | .17 (.06) | .16 (.05) |
| Voice turbulence index | .04 (.01) | .11 (.04) | .04 (.01) | .05 (.01) |
| Soft phonation index | 19.9 (15.2) | 2.9 (2.1) | 10.4 (5.9) | 10.4 (6.6) |
| Cepstral peak prominence (CPP) | 12.6 (2.9) | 19.6 (2.3) | 18.1 (2.0) | 17.4 (2.0) |
| Smoothed cepstral peak prominence (CPPS) | 5.1 (2.5) | 8.6 (1.8) | 8.2 (1.6) | 7.5 (1.35) |
| Mean *f0* (Hz; Praat) | 176 (61) | 180 (61) | 170 (60) | 176 (60) |
| Standard deviation of *f0* (Hz; Praat) | 1.9 (1.0) | 1.8 (1.0) | 1.9 (1.9) | 2.0 (1.4) |
| % Jitter (Praat) | .46 (.21) | .48 (.26) | .43 (.10) | .46 (.21) |
| % Shimmer (Praat) | 2.93 (1.34) | 5.77 (2.17) | 5.03 (2.34) | 3.88 (1.27) |
| Noise-to-harmonic ratio (Praat) | .01 (.01) | .06 (.03) | .03 (.01) | .02 (.01) |
| Harmonic-to-noise ratio (Praat) | 23.1 (2.6) | 14.1 (3.1) | 18.9 (2.9) | 19.4 (2.8) |
| Number of silences | 58 (19) | 65 (24) | 50 (15) | 96 (29) |
| Mean silence duration (sec) | 0.08 (0.02) | 0.07 (0.04) | 0.1 (0.03) | 0.08 (0.02) |
| Standard deviation of silence duration (sec) | 0.24 (0.07) | 0.19 (0.1) | 0.29 (0.07) | 0.24 (0.06) |
| Total silence time (sec) | 8.56 (2.27) | 7.79 (1.95) | 9.36 (2.68) | 15.07 (5.58) |
| Total speech time (sec) | 33.15 (4.31) | 34.71 (5.23) | 33.5 (4.86) | 28.36 (5.08) |
| Speech-silence ratio | 4.2 (1.3) | 5.0 (2.6) | 3.8 (1.2) | 3.5 (6.4) |

Abbreviations: HDD = hard disk recorder; PC = personal computer; IPH = iPhone; TEL = telephone