

Table A. Stimulus duration (d), mean f_0 , f_0 variation ($f_0\text{SD}$), and harmonics-to-noise ratio (HNR) measured over the whole utterance. Jitter (jit), shimmer (shim) and HNR_v were measured within a stable phase of the first vowel from 50 to 200 ms. Jitter (shimmer) is measured as the average absolute difference between consecutive periods (the amplitudes of consecutive periods), divided by the average period (amplitude), as defined in Praat software. All measurements were done before (pre) and after time standardization (post).

| | pre | | | | | | | | post | | | | | | | |
|---------|--------------|------|------------------|-----------------|-------------------|------|-------|--------------|------|------------------|-----------------|-------------------|------|-------|--|--|
| | stable phase | | | whole utterance | | | | stable phase | | | whole utterance | | | | | |
| | jit | shim | HNR _v | f ₀ | f ₀ SD | HNR | d | jit | shim | HNR _v | f ₀ | f ₀ SD | HNR | d | | |
| | [%] | [%] | [dB] | [Hz] | [Hz] | [dB] | [ms] | [%] | [%] | [dB] | [Hz] | [Hz] | [dB] | [ms] | | |
| fDK | | | | | | | | | | | | | | | | |
| aba | 0.3 | 3.0 | 20.6 | 204 | 11.8 | 15.9 | 573 | 0.3 | 2.0 | 21.6 | 202 | 11.8 | 17.2 | 620 | | |
| aga | 0.5 | 6.0 | 19.5 | 208 | 8.3 | 15.6 | 600 | 0.4 | 2.0 | 19.9 | 208 | 7.7 | 15.1 | 620 | | |
| ibi | 0.5 | 4.0 | 24.6 | 216 | 10.4 | 19.4 | 550 | 0.5 | 2.0 | 26.5 | 215 | 11.4 | 21.4 | 620 | | |
| igi | 0.3 | 3.0 | 27.8 | 224 | 5.6 | 24.2 | 566 | 0.4 | 2.0 | 27.5 | 224 | 4.9 | 24.6 | 620 | | |
| fEM | | | | | | | | | | | | | | | | |
| aba | 2.0 | 6.0 | 18.3 | 214 | 5.2 | 15.4 | 576 | 0.4 | 2.0 | 20.7 | 213 | 5.1 | 15.9 | 620 | | |
| aga | 0.3 | 2.0 | 20.7 | 212 | 5.2 | 16.6 | 704 | 0.3 | 3.0 | 20.8 | 212 | 4.9 | 17.8 | 620 | | |
| ibi | 0.3 | 5.0 | 26.8 | 218 | 5.7 | 21.2 | 692 | 0.3 | 2.0 | 26.5 | 219 | 4.9 | 22.1 | 620 | | |
| igi | 0.5 | 2.0 | 23.8 | 220 | 6.4 | 20.6 | 623 | 0.5 | 2.0 | 23.6 | 219 | 6.1 | 21.2 | 620 | | |
| mJN | | | | | | | | | | | | | | | | |
| aba | 0.8 | 5.0 | 13.2 | 104 | 4.7 | 13.2 | 667 | 0.4 | 3.0 | 16.1 | 104 | 4.8 | 13.5 | 620 | | |
| aga | 0.6 | 4.0 | 13.2 | 104 | 7.0 | 11.6 | 713 | 0.7 | 4.0 | 14.1 | 104 | 7.3 | 12.6 | 620 | | |
| ibi | 0.3 | 4.0 | 22.4 | 117 | 24.5 | 15.4 | 711 | 0.5 | 4.0 | 21.7 | 113 | 11.3 | 15.8 | 620 | | |
| igi | 0.4 | 4.0 | 24.7 | 125 | 18.0 | 16.3 | 800 | 0.4 | 4.0 | 24.3 | 125 | 8.4 | 18.1 | 620 | | |
| mUA | | | | | | | | | | | | | | | | |
| aba | 0.9 | 4.0 | 13.4 | 94 | 8.8 | 10.2 | 631 | 0.6 | 9.0 | 16.5 | 95 | 9.4 | 11.1 | 620 | | |
| aga | 2.0 | 7.0 | 9.1 | 89 | 8.9 | 11.7 | 682 | 2.0 | 6.0 | 9.1 | 90 | 9.2 | 11.6 | 620 | | |
| ibi | 2.0 | 4.0 | 22.2 | 96 | 12.5 | 14.7 | 614 | 0.5 | 5.0 | 22.7 | 97 | 12.8 | 15.0 | 620 | | |
| igi | 1.0 | 7.0 | 20.5 | 97 | 13.0 | 14.6 | 733 | 0.6 | 4.0 | 22.7 | 99 | 14.8 | 16.6 | 620 | | |
| female | | | | | | | | | | | | | | | | |
| M | 0.6 | 3.9 | 22.8 | 214.6 | 7.3 | 18.6 | 610.5 | 0.4 | 2.1 | 23.4 | 214.0 | 7.1 | 19.4 | 620.0 | | |
| SD | 0.6 | 1.6 | 3.5 | 6.7 | 2.6 | 3.2 | 58.2 | 0.1 | 0.4 | 3.1 | 7.0 | 2.9 | 3.4 | 0.0 | | |
| male | | | | | | | | | | | | | | | | |
| M | 1.5 | 5.5 | 16.3 | 94.1 | 10.8 | 12.8 | 665.3 | 0.9 | 6.0 | 17.7 | 95.0 | 11.5 | 13.6 | 620.0 | | |
| SD | 0.7 | 1.4 | 5.7 | 12.2 | 6.4 | 2.2 | 59.3 | 0.5 | 1.9 | 5.3 | 11.3 | 3.1 | 2.5 | 0.0 | | |
| overall | | | | | | | | | | | | | | | | |
| M | 0.8 | 4.4 | 20.0 | 158.9 | 9.7 | 16.0 | 652.3 | 0.6 | 3.5 | 20.9 | 158.6 | 8.4 | 16.8 | 620.0 | | |
| SD | 0.6 | 1.5 | 5.4 | 58.2 | 5.3 | 3.8 | 71.3 | 0.4 | 1.9 | 4.9 | 57.9 | 3.2 | 3.9 | 0.0 | | |