

Table S1. Description of the participants.

| Code | Gender | Age (y;m.d) | L1 | Receptive vocabulary size | Verbal short-term memory size | Phonological awareness z-score |
|------------------|---------------|------------------------|----------------------|--------------------------------------|--|---|
| EANA-P1 | F | 7;8.16 | Portuguese | 23 | 3 | -3.86 |
| EANA-P2 | M | 7;0.14 | Portuguese | 29 | 4 | -3.86 |
| EANA-P3 | F | 7;6.15 | Portuguese | 18 | 6 | 0.58 |
| EANA-P4 | M | 6;10.0 | Portuguese | 16 | 4 | -4.04 |
| EANA-P5 | M | 6;7.26 | Portuguese | 31 | 4 | -4.04 |
| EANA-P6 | F | 6;8.24 | Portuguese | 28 | 4 | -4.04 |
| EANA-P7 | F | 7;1.7 | Portuguese | 31 | 4 | -4.04 |
| EANA-A1 | M | 7;6.26 | Arabic | 18 | 4 | -3.86 |
| EANA-A2 | F | 8;5.29 | Arabic | 12 | 5 | -3.86 |
| EANA-A3 | F | 7;0.8 | Arabic | 14 | 5 | -2.5 |
| EANA-A4 | M | 8;9.2 | Arabic | 27 | 4 | -3.33 |
| EANA-A5 | M | 7;11.18 | Arabic | 20 | 4 | -0.19 |
| EANA-A6 | M | 6;9.22 | Arabic | 15 | 4 | -4.04 |
| EANA-A7 | F | 6;3.25 | Arabic | 21 | 2 | -4.04 |
| EANA-A8 | M | 6;11.24 | Arabic | 20 | 3 | -4.04 |
| EANA-A9 | F | 8;2.3 | Arabic | 23 | 3 | -2.39 |
| EANA-IA1 | F | 7;9.22 | Italian/Arabic | 15 | 4 | 0.44 |
| EANA-IA2 | F | 7;6.24 | Italian/Arabic | 21 | 5 | 0.62 |
| EANA-IA3 | M | 8;4.23 | Italian/Arabic | 18 | 4 | -1.45 |
| EANA-IA4 | M | 8;11.14 | Italian/Arabic | 18 | 3 | -2.39 |
| EANA-IA5 | F | 6;8.6 | Italian/Arabic | 21 | 3 | -4.04 |
| EANA-IA6 | M | 8;6.23 | Italian/Arabic | 14 | 4 | -3.33 |
| EANA-IA7 | M | 7;9.17 | Italian/Arabic | 22 | 3 | -3.86 |
| EANA-IA8 | F | 8;8.29 | Italian/Arabic | 26 | 4 | 0.44 |
| EANA-IA9 | M | 8;2.1 | Italian/Arabic | 27 | 3 | 0.44 |
| EANA-IA10 | M | 7;6.29 | Italian/Arabic | 20 | 4 | -0.87 |
| EANA-IA11 | F | 6;3.23 | Italian/Arabic | 27 | 5 | -4.04 |
| EANA-IA12 | F | 8;1.23 | Italian/Arabic | 24 | 3 | -2.39 |
| EANA-I1 | M | 6;6.15 | Italian | 23 | 4 | -4.04 |
| EANA-I2 | F | 7;5.13 | Italian | 28 | 5 | -2.37 |
| EANA-I3 | M | 7;3.21 | Italian | 29 | 4 | -3.86 |
| EANA-I4 | M | 8;7.4 | Italian | 19 | 4 | -2.86 |
| EANA-I5 | M | 8;4.14 | Italian | 24 | 4 | -1.45 |
| EANA-R1 | M | 6;4.27 | Romanian | 18 | 4 | - |
| EANA-R2 | M | 6;4.27 | Romanian | 13 | 4 | - |
| EANA-R3 | F | 7;3.29 | Romanian | 12 | 4 | -4.04 |
| EANA-R4 | F | 8;10.3 | Romanian | 23 | 4 | -0.5 |
| EANA-R5 | M | 6;1.0 | Romanian | 14 | 3 | -4.04 |
| EANA-AL1 | M | 8;5.29 | Albanese | 22 | 4 | -0.98 |
| EANA-AL2 | M | 7;1.20 | Albanese | 16 | 4 | -3.86 |
| EANA-AL3 | F | 8;1.23 | Albanese | 14 | 4 | -3.33 |
| EANA-AL4 | M | 6;4.0 | Albanese | 8 | 4 | - |
| EANA-AL5 | F | 8;1.9 | Albanese | 27 | 5 | -1.45 |
| EANA-AL6 | F | 6;8.24 | Albanese | 25 | 5 | -3.27 |
| EANA-M1 | F | 6;0.18 | Mandarin | 5 | 4 | -4.04 |
| EANA-EA1 | F | 7;1.13 | Spanish/Arabic | 24 | 3 | -2.37 |
| EANA-PB1 | M | 6;9.25 | Brazilian Portuguese | 18 | 4 | -4.04 |
| EANA-PB2 | M | 9;1.2 | Brazilian Portuguese | 27 | 4 | -0.5 |
| EANA-PB3 | F | 8;10.28 | Brazilian Portuguese | 25 | 3 | -3.86 |
| EANA-PB4 | M | 6;1.18 | Brazilian Portuguese | 27 | 5 | -4.04 |
| EANA-UR1 | M | 7;10.12 | Ukrainian/Russian | 22 | 4 | -3.86 |

| | | | | | | |
|------------------|---|--------|-------------------|----|---|-------|
| EANA-K1 | M | 6;10.7 | Kabyle | 25 | 3 | -3.27 |
| EANA-E1 | F | 7;9.9 | Spanish | 14 | 4 | -0.13 |
| EANA-AR1 | M | 7;1.2 | Armenian | 19 | 4 | -3.86 |
| EANA-AR2 | M | 8;2.13 | Armenian | 20 | 4 | -3.33 |
| EANA-AR3 | M | 6;9.15 | Armenian | 18 | 3 | -4.04 |
| EANA-RAR1 | M | 8;3.18 | Armenian /Russian | 17 | 3 | -3.86 |
| EANA-J1 | M | 6;9.7 | Japanese | 6 | 2 | - |
| EANA-J2 | M | 8;4.10 | Japanese | 7 | 4 | - |
| EANA-GA1 | M | 7;3.15 | Georgian/German | 13 | 3 | -4.04 |
| EANA-RUT | M | 7;5.25 | Russian/Chechen | 13 | 4 | -4.04 |
| EANA-RU | M | 8;2.0 | Russian | 6 | 4 | -3.86 |

Table S2. Syllabic complexity of the various L1 spoken by the participants.

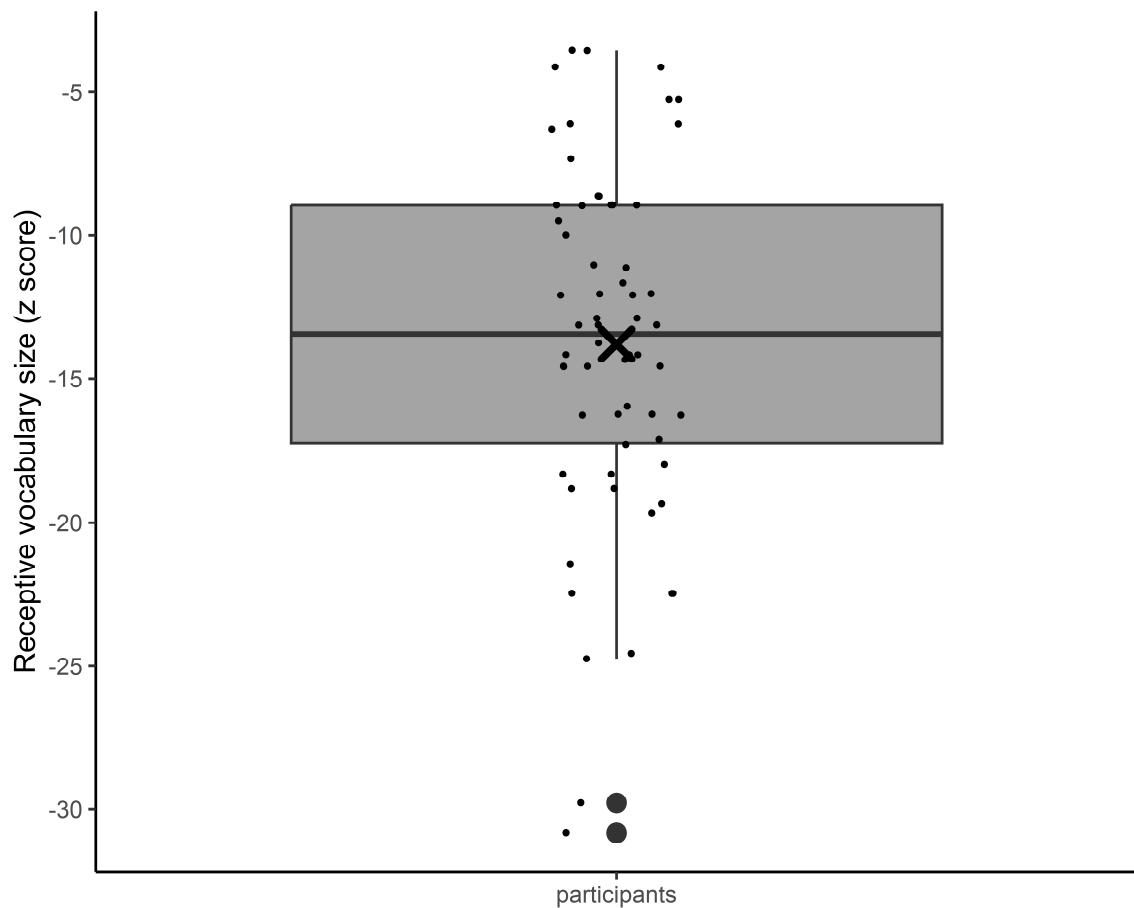
| L1 | Syllabic complexity |
|-----------------------------|---------------------|
| Arabic | 4 |
| Mandarin | 4 |
| Japanese | 4 |
| Portuguese | 5 |
| Brazilian Portuguese | 5 |
| Arabic / Spanish | 5 |
| Spanish | 5 |
| Arabic / Italian | 6 |
| Italian | 6 |
| Armenian | 6 |
| Ukrainian / Russian | 7 |
| Romanian | 7 |
| Albanian | 7 |
| Russian / Armenian | 7 |
| Russian | 7 |
| Georgian / German | 8 |
| Russian / Chechen | 8 |

As defined in the documentation of the online version of the Lapsyd database (https://lapsyd.huma-num.fr/lapsyd/doc/LAPSyD_20150319.pdf), syllabic complexity – also named syllable index – is the sum of three values: the maximal degree of elaboration of the onset, the maximal degree of elaboration of the nucleus, and the maximal degree of elaboration of the coda elements:

- ‘onset values are 0 for maximal one-consonant onset (since the CV syllable type is taken to be universal), 1 for common CC onsets (such as CG, CL), 2 for less common 2-consonant onsets, and 3 for maximally 3 or more consonants in onset.
- nucleus scores are 1 for single-mora nuclei as the maximum, and 2 for bimoraic (or potentially longer) nuclei.
- coda scores are 1 for maximally a single consonant, 2 for two consonants and 3 for 3 or more consonants allowed in coda.’ (p. 15)

Syllabic complexity thus varies between 0 – e.g., Yoruba (yor) – and 8 – e.g., English (eng).

Figure S3. Participants' inter-subject variability for the size of receptive vocabulary.



Boxplot of the distribution of the participants' z-scored sizes of receptive vocabulary. The cross represents the average value of the distribution, the line in the box the median. The thicker dots represent outliers, i.e., values further than 1.5 times the inter-quartile range from either the first or third quartile.