

Supplemental Material S1. Individual characteristics for participants with developmental language disorder (DLD) with respect to age, gender, and the following test scores: productive vocabulary (Picture Naming: bold score ≈ -1.25 SD according to grade-level Z score for participants with typical development [TD]); receptive vocabulary (Peabody Picture Vocabulary Test–Revised [PPVT-R]: bold score ≈ -1.25 SD according to grade-level Z score for participants with TD); receptive grammar (TROG-2 = Test for Reception of Grammar–Second Edition [TROG-2]: bold score ≈ -1.25 SD; i.e., \leq standard score 81.25); productive grammar (Clinical Evaluation of Language Fundamentals–Fourth Edition [CELF-4], Formulated Sentences: bold score ≈ -1.25 SD; i.e., \leq scaled score 6.25; the Scandinavian version of test is only normed up to 12;11 years, so for older participants the norms for 12;0–12;11 were used); parental communication rating (Children’s Communication Checklist–2 [CCC-2]: bold score \approx General Communication Composite below cut-off [54 \approx the 10th percentile]); nonverbal cognitive skills (matrices: bold score ≈ -2 SD, i.e., \leq T-score 30); verbal short-term memory (STM; CELF-4, Forward Digit Span, scaled score; the Scandinavian version of test is only normed up to 12;11 years, so for older participants the norms for 12;0–12;11 were used); verbal working memory (WM; CELF-4, Backward Digit Span, scaled score; the Scandinavian version of test is only normed up to 12;11 years, so for older participants the norms for 12;0–12;11 were used); sentence recall (CELF-4, Recalling Sentences, scaled score; the Scandinavian version of test is only normed up to 12;11 years, so for older participants the norms for 12;0–12;11 were used), and hearing screening (passed: 500, 1000, 2000, and 4000 Hz tones to both ears passed at 20 dB; tones mentioned were not passed at 20 dB).

| Participant code | Age | Gender | Productive vocabulary (Z score) | Receptive vocabulary (Z score) | Receptive grammar (standard score, $M = 100$, $SD = 15$) | Productive grammar (scaled score, $M = 10$, $SD = 3$) | Parental communication rating | Nonverbal cognitive skills (T-score, $M = 50$, $SD = 10$) | Verbal STM (scaled score, $M = 10$, $SD = 3$) | Verbal WM (scaled score, $M = 10$, $SD = 3$) | Sentence recall (scaled score, $M = 10$, $SD = 3$) | Hearing screening | Other information |
|------------------|------|--------|---------------------------------|--------------------------------|--|---|-------------------------------|---|---|--|--|---|---|
| Y-DLD-1 | 5;10 | Male | -2.79 | -0.01 | 80 | 7 | 39 | 50 | 4 | 10 | — | Passed | |
| Y-DLD-2 | 7;10 | Female | -3.75 | -0.92 | 55 | 2 | 51 | 45 | 4 | 1 | 4 | — left 500+1000Hz at 30 dB | |
| Y-DLD-3 | 7;6 | Male | -2.51 | -1.12 | 84 | 3 | 69 | 43 | 2 | 7 | 5 | — left 500+2000 +4000 Hz at 30 dB | CCC-2: Scaled score 2 for Speech and 6 for Syntax & Morphology |
| Y-DLD-4 | 8;6 | Male | -1.86 | -0.76 | 103 | 3 | 30 | 53 | 12 | 8 | 3 | Passed | |
| Y-DLD-5 | 7;11 | Male | -5.83 | -2.60 | 59 | 3 | 31 | 48 | 4 | 7 | 1 | Passed | |
| Y-DLD-6 | 8;2 | Female | -2.40 | -3.24 | 88 | 8 | 52 | 52 | 3 | 7 | 1 | Passed | |
| Y-DLD-7 | 9;1 | Male | -4.57 | -3.11 | 67 | 1 | 53 | 52 | 4 | 8 | 1 | — right 2000 Hz + left 4000 Hz at 30 dB, right 4000 Hz at 40 dB | |
| Y-DLD-8 | 8;6 | Male | -1.68 | -1.46 | 98 | 1 | 31 | 50 | 12 | 8 | 2 | — right 500+2000+ 4000 Hz at 30 dB | |

| Participant code | Age | Gender | Productive vocabulary (Z score) | Receptive vocabulary (Z score) | Receptive grammar (standard score, <i>M</i> = 100, <i>SD</i> = 15) | Productive grammar (scaled score, <i>M</i> = 10, <i>SD</i> = 3) | Parental communication rating | Nonverbal cognitive skills (T-score, <i>M</i> = 50, <i>SD</i> = 10) | Verbal STM (scaled score, <i>M</i> = 10, <i>SD</i> = 3) | Verbal WM (scaled score, <i>M</i> = 10, <i>SD</i> = 3) | Sentence recall (scaled score, <i>M</i> = 10, <i>SD</i> = 3) | Hearing screening | Other information |
|------------------|------|--------|---|--------------------------------|--|---|-------------------------------|---|---|--|--|---------------------------------|---|
| Y-DLD-9 | 7;7 | Male | -3.89 | 0.50 | 64 | 5 | 42 | 49 | 5 | 9 | 4 | — left 4000 Hz at 30 dB | |
| Y-DLD-10 | 7;7 | Male | -2.51 | -2.14 | 84 | 1 | Invalid | 45 | 5 | 11 | 6 | — left 500 Hz at 30 dB | |
| Y-DLD-11 | 9;11 | Male | -5.10 | -1.47 | 93 | 5 | 12 | 49 | 6 | 6 | 2 | — right 500+4000 Hz at 30 dB | |
| Y-DLD-12 | 8;5 | Female | -2.37 | -2.14 | 62 | 1 | Invalid | 43 | 3 | 8 | 1 | — refused to participate | |
| Y-DLD-13 | 6;4 | Male | test discontinued: severe word finding problems (-4.13) | -0.58 | 88 | 1 | - | 59 | 10 | 9 | 5 | Passed | |
| Y-DLD-14 | 8;7 | Female | -4.06 | -1.59 | 83 | 1 | Invalid | 41 | 8 | 8 | 4 | Passed | Danish-Swahili bilingual |
| Y-DLD-15 | 6;2 | Male | -1.72 | -2.57 | 64 | 4 | 36 | 70 | 5 | 6 | 1 | — could not participate | Danish-English bilingual |
| Y-DLD-16 | 6;7 | Male | -2.06 | 0.49 | 71 | 1 | — | 46 | 6 | 10 | 3 | — left 500+4000 Hz at 30 dB | |
| O-DLD-1 | 11;1 | Male | -5.99 | -1.04 | 101 | 4 | 49 | 52 | 5 | 7 | 2 | Passed | Learning disability diagnosis in 1 st grade, but admitted into a language unit where unimpaired nonverbal skills are required. |

| Participant code | Age | Gender | Productive vocabulary (Z score) | Receptive vocabulary (Z score) | Receptive grammar (standard score, <i>M</i> = 100, <i>SD</i> = 15) | Productive grammar (scaled score, <i>M</i> = 10, <i>SD</i> = 3) | Parental communication rating | Nonverbal cognitive skills (T-score, <i>M</i> = 50, <i>SD</i> = 10) | Verbal STM (scaled score, <i>M</i> = 10, <i>SD</i> = 3) | Verbal WM (scaled score, <i>M</i> = 10, <i>SD</i> = 3) | Sentence recall (scaled score, <i>M</i> = 10, <i>SD</i> = 3) | Hearing screening | Other information |
|------------------|-------|--------|---------------------------------|--------------------------------|--|---|-------------------------------|---|---|--|--|-------------------|---|
| | | | | | | | | | | | | | Good function indicated in teacher and parent reports and T-scores 65 on Spatial Span and 48 on Picture Arrangement |
| O-DLD-2 | 11;3 | Male | -1.66 | 0.09 | 71 | 1 | Invalid | 41 | 8 | 8 | 7 | Passed | |
| O-DLD-3 | 11;9 | Female | -5.53 | -2.28 | 76 | 1 | 9 | 47 | 3 | 10 | 1 | Passed | |
| O-DLD-4 | 11;10 | Male | -2.22 | -1.33 | 96 | 5 | 56 | 47 | 7 | 8 | 5 | Passed | CCC-2: Scaled score 4 for Speech, 6 for Syntax & Morphology and Coherence, and 5 for Semantics |
| O-DLD-5 | 11;6 | Male | -1.47 | 0.85 | 106 | 6 | 55 | 45 | 10 | 12 | 7 | Passed | CCC-2: Scaled score 2 for Speech and, 5 for Syntax & Morphology and Semantics |
| O-DLD-6 | 12;1 | Male | -3.16 | -0.19 | 96 | 5 | 25 | 56 | 8 | 7 | 1 | Passed | |
| O-DLD-7 | 14;1 | Male | -2.11 | -0.89 | 84 | 1 | 70 | 56 | 7 | 5 | 7 | Passed | CCC-2: 4 for Speech, 6 for Syntax & Morphology and Coherence, |

| Participant code | Age | Gender | Productive vocabulary (Z score) | Receptive vocabulary (Z score) | Receptive grammar (standard score, <i>M</i> = 100, <i>SD</i> = 15) | Productive grammar (scaled score, <i>M</i> = 10, <i>SD</i> = 3) | Parental communication rating | Nonverbal cognitive skills (T-score, <i>M</i> = 50, <i>SD</i> = 10) | Verbal STM (scaled score, <i>M</i> = 10, <i>SD</i> = 3) | Verbal WM (scaled score, <i>M</i> = 10, <i>SD</i> = 3) | Sentence recall (scaled score, <i>M</i> = 10, <i>SD</i> = 3) | Hearing screening | Other information |
|------------------|------|--------|---------------------------------|--------------------------------|--|---|-------------------------------|---|---|--|--|--|--|
| | | | | | | | | | | | | | and 5 for Semantics |
| O-DLD-8 | 13;8 | Male | -2.11 | -1.20 | 101 | 2 | 49 | 48 | 10 | 7 | 8 | Passed | |
| O-DLD-9 | 13;2 | Male | -3.57 | -1.67 | 91 | 2 | 47 | 50 | 5 | 6 | 2 | Passed | ADHD Has developed a stutter |
| O-DLD-10 | 11;4 | Female | -2.78 | -0.95 | 81 | 1 | 73 | 35 | 7 | 8 | 6 | — right 500 Hz + left 2000 Hz at 30 dB | CCC-2: 6 for Speech, 4 for Syntax & Morphology and Semantics |
| O-DLD-11 | 13;2 | Female | -6.90 | -3.14 | 55 | 2 | 62 | 38 | 2 | 6 | 1 | — right 2000 Hz at 30 dB | CCC-2: 4 for Speech, 3 for Syntax & Morphology, 6 for Semantics, and 5 for Coherence |