Supplemental Material S3. Validity studies: method, age range and number of participants, and obtained correlations. The table is ordered by the publication's year.

* Partial correlation. [1] Only significant correlations ($p < .05$) are listed. [2] Yet another age range (WG), inconsistent with the study's description, was given by the authors. [3] No information on the sessions' length and/or location available. [4] Yet another number of participants ($N = 42$), inconsistent with the study's description, was given by the authors. [5] Other tasks measuring active lexicon (verbs and nouns) were used, $r = 0.71$ (Table 8.3). [6] Because of a long interval between CDIs 'administration (= 6M), we consider correlations to be indicative of predictive validity, and not of long-term reliability, as suggested by the authors.

Validity studies	**Method**	**Age range; number of participants**	**Correlations**[1]
1. Criterion-based concurrent validity ***1a. Spontaneous language samples***			
Mexican Spanish: Jackson-Maldonado et al. (1993)	30-min recorded session in the lab	15–31M[2]; 17	CDI vocabulary and number of different words: 0.84
Icelandic: Thordardottir & Ellis Weismer (1996, Table 4)	recorded session[3]	15–36M; 18	CDI vocabulary and type-token ratio: 0.71 CDI vocabulary and total number of words: 0.91 CDI vocabulary and MLU: 0.89 CDI Complexity and MLU: 0.86 CDI Complexity and total number of words: 0.82
Mexican Spanish: Jackson-Maldonado et al. (2003)	recorded session[3]	12M; 15	CDI vocabulary and number of different words: 0.61 CDI gestures and communicative gestures: 0.47
	35-min recorded session	20M; 20	CDI vocabulary and number of different words: 0.66
		28M; 19	CDI vocabulary and number of different words: 0.56

Validity studies	**Method**	**Age range; number of participants**	**Correlations**[1]
Peninsular Spanish: López Ornat et al. (2005)	45-min recorded sessions at home	17–28M; 32	CDI Complexity and spontaneous grammar structures (i.e., morphological forms): 0.87
Basque: García et al. (2008)	45-min recorded sessions in the lab	16–30M; 17	CDI vocabulary and number of different words: 0.76 CDI M3L and MLU: 0.54
Canadian French: Trudeau et al. (2008, Table 4)	20-min recorded session in the lab	19–21M; 25	CDI vocabulary and number of transcribed words: 0.61 CDI vocabulary and MLU: 0.72 CDI M3L and MLU: 0.79 CDI M3L and number of transcribed words: 0.76
		26–28M; 23	CDI vocabulary and number of transcribed words: 0.57 CDI vocabulary and MLU: 0.68 CDI M3L and MLU: 0.74 CDI M3L and number of transcribed words: 0.74
German: Szagun et al. (2009, Table 11)	2-hour recorded session	WS; 59	CDI vocabulary and number of type words: 0.83* CDI Complexity and MLU: 0.82* CDI Morphology and MLU: 0.85*
Irish: O'Toole & Fletcher (2010, Table 3, Table 4)	15 min recorded session at home	16–40M; 21	CDI vocabulary and number of different words: 0.66* CDI vocabulary and type-token ratio: 0.45* CDI Complexity and MLU: 0.46* CDI M3L and MLU: 0.53*
Slovak: Kapalková et al. (2010)	1-hour recorded session at home (mixed with Lahey's method)	8–16M; 16	CDI vocabulary and total number of words: 0.70 semantic categories: 0.78 gestures: 0.55

Validity studies	**Method**	**Age range; number of participants**	**Correlations**[1]
			total scores agreement: 82.5 %
Galician: Pérez Pereira & Resches (2011, Table 3)	30-min recorded session at home	18M; 42	CDI vocabulary and lexical diversity: 0.86 CDI M3L and MLU: 0.53 CDI vocabulary and MLU: 0.38 CDI M3L and lexical diversity: 0.47 CDI M3L and MLU: 0.53
		24M; 42	CDI vocabulary and lexical diversity: 0.80, CDI vocabulary and MLU: 0.73, CDI M3L and lexical diversity: 0.74 CDI M3L and MLU: 0.73
Kenyan: Alcock et al. (2015)	30–60-min recorded sessions at home	20–28M; 10	CDI vocabulary and type-token ratio: 0.54 CDI grammar scores and type-token ratio: 0.60
1b. Standardized tests			
Icelandic: Thordardottir & Ellis Weismer (1996, Table 4)	EOWPVT	15–36M; 18	CDI vocabulary and EOW: 0.84 CDI Complexity and EOW: 0.81
Cantonese: Tardif & Fletcher (2008, Table 4.8c & 4.8d)[4]	Reynell	11,12 or 15M; 42	CDI vocabulary and Reynell expressive: 0.57* CDI gestures and Reynell expressive: 0.35*
		18, 24, or 30M; 57	CDI vocabulary and Reynell receptive: 0.47* CDI vocabulary and Reynell expressive: 0.60* CDI Complexity and Reynell receptive: 0.46*

Validity studies	**Method**	**Age range; number of participants**	**Correlations**[1]
			CDI Complexity and Reynell expressive: 0.56*
Mandarin: Tardif & Fletcher (2008, Table 4.8a & 4.8b)	Gesell	12M; 36	CDI vocabulary and Gesell verbal: 0.55 CDI gestures and Gesell verbal: 0.30
		18, 24, or 30M; 60	CDI vocabulary and Gesell verbal: 0.76* CDI vocabulary and Gesell performance: 0.51* CDI Complexity and Gesell verbal: 0.78* CDI Complexity and Gesell performance: 0.50*
Canadian French: Trudeau et al. (2008)	PLS as a pre-screening test	8–10M, 13–15M, 19–21M, 26–28M; 121	x
Basque: García et al. (2008)	Inventario de Desarrollo Battelle	8–15M; 11	CDI vocabulary and IDB vocabulary: 0.917
		16–30M; 9	CDI vocabulary and IDB vocabulary: 0.81
Polish: Smoczyńska et al. (2015)	OTSR = Obrazkowy Test Słownikowy Rozumienie[5]	24–36M; 145	CDI vocabulary and OTSR: 0.41–0.44
British: Alcock et al. (2020)	PLS 5th UK Edition	16–18M; 32	CDI comprehension and PLS comprehension score: 0.413, CDI vocabulary and PLS expressive score: 0.391
1c. Own experimental methods			

Validity studies	**Method**	**Age range; number of participants**	**Correlations**[1]
Swedish: Eriksson (2001, Table 4)	producing a narrative	36 or 42M; 27	CDI M3L and MLU: 0.54 CDI M3L and number of word types: 0.70
Mexican Spanish: Jackson-Maldonado et al. (2003)	object-naming task	20M; 20	CDI vocabulary and production score from object naming task: 0.69
		28M; 19	CDI vocabulary and production score from object naming task: 0.68
Kenyan: Alcock et al. (2015)	object-naming task	9–15M; 19	None of the children named a object or toy
	gesture challenge task		CDI gesture score and gesture score from the task: 0.63 CDI comprehension score and gesture score from the task: 0.61
	object-selection task	12–15M; 20	CDI comprehension and comprehension score from the task: 0.45
	PVT	24–30M; 23	CDI vocabulary and picture naming task: 0.52
Faroese: Rasmussen & Bleses (2018)	picture naming task	30–36M; 12	70% of agreement between CDI vocabulary and picture naming task
British: Alcock et al. (2020)	object selection task	16–18M; 32	CDI comprehension and object selection task: 0.413 CDI vocabulary and object selection task: 0.43
	gesture challenge task	16–18M; 32	CDI gestures and gesture score: 0.34

Validity studies	**Method**	**Age range; number of participants**	**Correlations**[1]
2. Predictive validity ***2a. Comparing the CDIs***			
Finnish: Lyytinen et al. (1996, Table 3)	interval between CDIs: 4 months	1st CDI at 14M; 94	1st CDI and 2nd vocabulary: 0.76
New Zealand English: Reese & Read (2000, Table 1)	interval between CDIs: 6 months[6]	1st CDI at 19M; 59	1st CDI and 2nd Complexity: 0.73 1st CDI and 2nd M3L: 0.76
Swedish: Eriksson (2001, Table 6)	interval between CDIs: 14 months	1st CDI at 22 or 28M + 2nd CDI at 36 or 42M; 27	1st CDI vocabulary and 2nd CDI grammar score: 0.41 1st CDI M3L and 2nd CDI grammar score: 0.48 1st CDI M3L and 2nd CDI MLU: 0.56 1st CDI grammar and 2nd CDI grammar scores: 0.49
Peninsular Spanish: López Ornat et al. (2005)	interval between CDIs: 2–5 months	WG + WS; 19 WG + WG; 9 WS + WS; 6	1st CDI and 2nd CDI comprehension: 0.96 1st CDI and 2nd CDI vocabulary: > 0.80
Croatian: Kovacevic et al. (2007)	interval between CDIs: 6 months	1st CDI at 8–10M + 2nd CDI 14–17M; 47	1st CDI and 2nd CDI vocabulary: 0.38* 1st CDI and 2nd CDI comprehension: 0.44* 1st CDI and 2nd CDI gestures: 0.44*
		1st CDI at 10–16M + 2nd CDI 16–25; 217	1st CDI and 2nd CDI vocabulary: 0.69*
		1st CDI at 16–24M + 2nd CDI	1st CDI and 2nd total scores: 0.71* 1st CDI and 2nd CDI Complexity: 0.62*

Validity studies	**Method**	**Age range; number of participants**	**Correlations**[1]
		22–30M; 228	
Canadian French: Trudeau et al. (2008)	interval between CDIs: 6 months	1st CDI at 8–10M; 20	1st and 2nd CDI comprehension: 0.57
		1st CDI at 13–15M; 31	1st and 2nd CDI vocabulary: 0.65 1st CDI vocabulary and 2nd CDI grammar morphemes: 0.52 1st CDI gesture and 2nd CDI vocabulary: 0.43 1st CDI gesture and 2nd CDI grammar morphemes: 0.47
		1st CDI at 19–21M; 28	1st and 2nd CDI vocabulary: 0.82 1st CDI vocabulary and 2nd CDI Complexity: 0.78 1st CDI vocabulary and 2nd CDI grammar morphemes: 0.7 1st CDI Complexity and 2nd CDI vocabulary: 0.59 1st CDI Complexity and 2nd CDI grammar morphemes: 0.66 1st and 2nd CDI Complexity: 0.63 1st and 2nd CDI grammar morphemes: 0.74 1st CDI grammar morphemes and 2nd CDI vocabulary: 0.78 1st CDI grammar morphemes and 2nd CDI Complexity: 0.78
		1st CDI at 26–28M; 27	1st and 2nd CDI vocabulary: 0.84 1st CDI vocabulary and 2nd CDI Complexity: 0.78 1st CDI vocabulary and 2nd CDI grammar morphemes: 0.73 1st CDI Complexity and 2nd CDI vocabulary: 0.65 1st CDI Complexity and 2nd CDI grammar morphemes: 0.61 1st and 2nd CDI Complexity: 0.59

Validity studies	**Method**	**Age range; number of participants**	**Correlations**[1]
			1st and 2nd CDI grammar morphemes: 0.74 1st CDI grammar morphemes and 2nd CDI vocabulary: 0.58 1st CDI grammar morphemes and 2nd CDI Complexity: 0.60
Basque: García et al. (2008)	interval between CDIs: 6 months	1st CDI at 8–15M; 31	1st and 2nd CDI comprehension: 0.61 1st and 2nd CDI vocabulary: 0.45
		1st CDI at 16–24M; 29	1st and 2nd CDI vocabulary: 0.84 1st and 2nd CDI Complexity: 0.54
German: Szagun et al. (2009, Table 12)	interval between CDIs: 4–7 months	1st CDI at 18–24M; 56	1st and 2nd CDI vocabulary: 0.64* 1st and 2nd CDI Complexity: 0.58* 1st and 2nd CDI grammar morphemes: 0.61*
Irish: O'Toole & Fletcher (2010, Table 5, Table 6)	interval between CDIs: 6 months	1st CDI at 16–21M and 2nd CDI at 22–27M; 9	1st and 2nd CDI vocabulary: 0.83 1st and 2nd CDI Complexity: 0.77 1st and 2nd CDI M3L: 0.68
		2nd CDI at 22–27M and 3rd CDI at 28–33; 7	2nd and 3rd CDI vocabulary: 0.96 2nd and 3rd CDI Complexity: 0.85
Slovak: Kapalková et al. (2010)	interval between CDIs: 6 months	1st CDI at 8–10M; 62	1st CDI and 2nd CDI vocabulary: 0.38 1st CDI and 2nd CDI comprehension: 0.44 1st CDI and 2nd CDI gestures: 0.44
		1st CDI at 16–24M; 228	1st CDI and 2nd CDI vocabulary: 0.71 1st CDI and 2nd CDI comprehension: 0.71

Validity studies	**Method**	**Age range; number of participants**	**Correlations**[1]
		1st CDI at 10–16M; 217	1st CDI and 2nd CDI vocabulary: 0.69
	interval between CDIs: 10–12 months	1st CDI at 9–13M; 24	1st CDI and 2nd CDI vocabulary: 0.58 1st CDI and 2nd CDI comprehension: 0.51
		1st CDI at 14–16M; 38	1st CDI and 2nd CDI vocabulary: 0.59 1st CDI and 2nd CDI comprehension: 0.48
Galician: Pérez Pereira & Resches (2011)	interval between CDIs: 6 months	1st CDI at 18M; 42	N/A
Polish: Smoczyńska et al. (2015)	interval between CDIs: max. 135 days	WG; 20	1st CDI and 2nd CDI comprehension: 0.68 1st CDI and 2nd CDI vocabulary: 0.76 1st CDI and 2nd CDI gestures: 0.80
		WS; 93	1st CDI and 2nd CDI vocabulary: 0.89
Australian English: Kalashnikova et al. (2016)	interval between CDIs: 6 months[6]	1st CDI at 12-30M; 66	1st CDI and 2nd general correlation: 0.43
2b. Comparing CDI with other scales			
Finnish: Lyytinen et al. (1996, Table 3)	RDLS	CDI at 14M and RDLS at 18M; 94	CDI vocabulary and RDLS expressive score: 0.60 CDI vocabulary and RDLS comprehension score: 0.20
		1st CDI at 19M,	1st CDI vocabulary and EVT: 0.50 (at 32M) & 0.46 (at 40M)

Validity studies	**Method**	**Age range; number of participants**	**Correlations**[1]
New Zealand English: Reese & Read (2000, Table 2)	EVT	EVT at 32M and 40M; 59	1st CDI Complexity and EVT: 0.32 (at 32M) & 0.38 (at 40M) 1st CDI M3L and EVT: 0.39 (at 32M) & 0.47 (at 40M)
		2nd CDI at 25M, EVT at 32M and 40M; 59	2nd CDI vocabulary and EVT: 0.50 (at 32M) & 0.43 (at 40M) 2nd CDI Complexity and EVT: 0.43 (at 32M) & 0.42 (at 40M) 2nd CDI M3L and EVT: 0.47 (at 32M) & 0.46 (at 40M)
	PPVT	1st CDI at 19M, PPVT at 32M (form A) and 40M (form B); 59	1st CDI vocabulary and PPVT: 0.48 (at 32M & 40M) 1st CDI Complexity and PPVT: 0.36 (at 32M) & 0.41 (at 40M) 1st CDI M3L and PPVT: 0.27 (at 32M) & 0.44 (at 40M)
		2nd CDI at 24M, PPVT at 32M (form A) and 40M (form B); 59	2nd CDI vocabulary and PPVT: 0.44 (at 32M & 40M) 2nd CDI Complexity and PPVT: 0.45 (at 32M) & 0.36 (at 40M) 2nd CDI M3L and PPVT: 0.48 (at 32M) & 0.43 (at 40M)
Swedish: Eriksson (2001, Table 6)	producing a narrative	CDI at 22 or 28M; 32 1st narrative task at 36 or 42M; 27 2nd narrative task at 48 and 54 M; 20 (15 on all three occasions)	CDI vocabulary score and number of word types: 0.377 CDI vocabulary score and MLU: 0.466 CDI M3L and number of word types: 0.578 CDI M3L and MLU: 0.630

Validity studies	**Method**	**Age range; number of participants**	**Correlations**[1]
Irish: O'Toole & Fletcher (2010, Table 5, Table 6)	15-min recorded session	CDI at 16–21M and spontaneous language sample at 22–27M; 9	CDI vocabulary and number of transcribed words: 0.92 CDI M3L and MLU: 0.73 CDI Complexity and MLU: 0.73
		CDI at 22–27M and spontaneous language sample at 28–33M; 7	CDI vocabulary and number of transcribed words: 0.86 CDI M3L and MLU: nonsignificant CDI Complexity and MLU: nonsignificant
Galician: Pérez Pereira & Resches (2011, Table 5)	WPPSI-R	1st CDI at 18M and 2nd CDI at 24M and WPPSI-R at 48M; 42	1st CDI vocabulary and WPPSI verbal IQ: 0.42 2ndt CDI vocabulary and WPPSI verbal IQ: 0.38
	RDLS-III	1st CDI at 18M and 2nd CDI at 24M and RDLS at 48M; 42	1st CDI vocabulary and RDLS expressive score: 0.38 2ndt CDI vocabulary and RDLS expressive score: 0.58 2ndt CDI vocabulary and RDLS comprehension score: 0.52
Estonian: Schults (2016)	recorded sessions at home	recording at 14M and CDI at 16M; 10	CDI vocabulary and number of transcribed words: 0.66