

Supplementary material

Tables S1-S2 Summary

These two tables show post-hoc test results on clausal embedding measures for all groups at T1 and T2.

Tables S3-S4 Summary

These two tables display individual results of standardized test and clausal embedding measures in the L2 Group. Low scores are shaded grey. The first table (S3) shows results from T1 and the second table (S4) has results from T2.

Table S1. *Post-Hoc Test Results on Clausal Embedding Measures at T1.*

Measure	Comparison	Post-hoc results at T1			
		Lower CI ^a	Upper CI	<i>p</i> ^b	<i>d</i> ^c
Rate of Subordination (Sub)	L2 & SLI	-5.70	23.61	.13	0.54
	L2 & TD4	-6.37	24.59	.06	0.56
	L2 & TD8+11	-11.28	11.19	.99	0.06
	SLI & TD4	-14.12	16.65	.62	0.07
	SLI & TD8+11	-19.94	2.23	.06	0.6
Rate of Complex Utterances (Cplx)	L2 & SLI	0.24	16.72	.01	0.76
	L2 & TD4	-0.48	17.58	.02	0.72
	L2 & TD8+11	-8.21	8.56	.74	0.06
	SLI & TD4	-7.27	9.13	.40	0.09
	SLI & TD8+11	-13.57	-0.39	.00	0.82
Clausal Density (CDens)	L2 & SLI	-0.11	0.24	.21	0.35
	L2 & TD4	-0.06	0.29	.03	0.62
	L2 & TD8+11	-0.20	0.11	.44	0.24
	SLI & TD4	-0.12	0.24	.35	0.28
	SLI & TD8+11	-0.28	0.04	.04	0.64
Rate of Deep Embedding (DeepE)	L2 & SLI	-5.88	15.40	.17	0.31
	L2 & TD4	-9.26	12.32	.46	0.08
	L2 & TD8+11	-7.39	9.40	.82	0.01
	SLI & TD4	-13.75	7.34	.46	0.2
	SLI & TD8+11	-13.85	5.84	.14	0.3

Note: The L2 group includes 20 children here since ALP and SAJ are excluded from group analyses.

^a 95% Confidence Interval

^b critical *p*-value = .009

^c Cohen's *d*

Table S2. *Post-Hoc Test Results on Clausal Embedding Measures at T2.*

Measure	Comparison	Post-hoc results at T2			
		Lower CI ^a	Upper CI	<i>p</i> ^b	<i>d</i> ^c
Rate of Subordination (Sub)	L2 & SLI	2.28	27.30	.00	1.24
	L2 & TD4	-7.50	22.67	.09	0.55
	L2 & TD8+11	-13.02	11.38	.66	0.04
	SLI & TD4	-21.99	8.25	.38	0.1
	SLI & TD8+11	-25.53	-5.87	.00	1.36
Rate of Complex Utterances (Cplx)	L2 & SLI	-1.39	14.46	.03	0.95
	L2 & TD4	-3.40	13.64	.03	0.65
	L2 & TD8+11	-9.15	5.52	.34	0.2
	SLI & TD4	-9.35	9.06	.93	0.21
	SLI & TD8+11	-17.91	-1.97	.00	1.06
Clausal Density (CDens)	L2 & SLI	-0.04	0.30	.02	0.76
	L2 & TD4	-0.02	0.30	.01	0.75
	L2 & TD8+11	-0.18	0.10	.37	0.21
	SLI & TD4	-0.19	0.17	.95	0.06
	SLI & TD8+11	-0.32	-0.02	.00	0.92
Rate of Deep Embedding (DeepE)	L2 & SLI	5.99	19.35	.00	1.36
	L2 & TD4	-5.97	14.50	.19	0.32
	L2 & TD8+11	-6.47	10.90	.36	0.27
	SLI & TD4	-19.38	1.03	.03	0.84
	SLI & TD8+11	-16.68	-1.82	.00	1.1

Note: The L2 group includes 20 children here since ALP and SAJ are excluded from group analyses

^a 95% Confidence Interval

^b critical *p*-value = .009

^c Cohen's *d*

Table S3. *Standardized Test and Clausal Embedding Measures in the L2 Group at T1.*

T1		Standardized test and spontaneous language measures (z-scores) ^a									
Child	Age	LoE	SentCpl	WRep	Vocab	CLS	Sub	Cplx	CDens	DeepE	ER
RHR	6;9	1;11	-0.1	-0.1	-2.1	-1.3	45.8	35.4	1.6	9.1	37.3
PUS	7;1	2;7	-1.0	-1.5	-0.7	-3.2	25.0	25.0	1.4	0.0	16.9
ALC	7;4	1;7	0.2	0.6	-0.5	0.4	30.2	23.3	1.3	23.1	22.6
LOS	7;4	0;11	-2.9	-1.0	-1.3	0.6	10.0	7.5	1.1	25.0	25.9
ALJ	7;8	2;3	-1.7	-2.2	-0.5	0.8	56.4	41.0	1.7	22.7	36.8
BEA	8;9	3;5	-6.0	-4.8	0.0	-0.6	34.0	25.5	1.4	12.5	23.3
IOC	8;9	3;8	-2.7	-1.5	-2.3	-1.5	28.3	20.8	1.3	20.0	15.5
WRS	8;9	2;7	-3.9	-4.0	0.3	-1.9	39.3	30.4	1.4	18.2	17.2
LEP	9;0	3;1	-6.0	-4.8	-1.9	-1.2	41.4	34.5	1.4	16.7	28.0
HAS	9;1	0;11	-8.1	-8.2	-3.1	-1.2	30.6	25.0	1.4	0.0	45.3
EMH	9;4	0;11	-8.1	-3.2	-1.2	-1.1	51.9	37.0	1.7	17.9	46.7
LAD	9;7	3;8	-3.5	-0.2	-1.2	0.5	44.9	32.7	1.5	18.2	37.7
MER	9;10	1;11	-2.5	-1.9	-2.1	-1.0	36.5	32.7	1.5	0.0	30.9
HEA	10;1	3;5	-2.2	-4.7	-1.2	-0.7	53.7	40.7	1.6	24.1	16.4
HOS	10;8	2;7	0.6	-1.6	-0.3	0.5	80.8	53.8	1.8	21.4	10.2
SAJ	11;1	2;9	-3.8	-5.3	-2.1	-3.1	25.0	18.2	1.3	9.1	16.4
DAD	11;3	3;9	0.8	-0.2	0.1	0.5	57.9	45.6	1.6	12.1	22.6
MAS	11;4	0;11	-3.2	-2.8	-2.4	0.1	36.2	34.0	1.4	5.9	51.7
LIB	11;8	4;0	-0.5	-1.2	-0.9	0.1	23.3	16.3	1.2	20.0	9.4
RAG	12;0	3;11	1.3	-0.2	1.3	0.6	43.6	38.2	1.5	8.3	11.1
LOC	12;3	1;5	-4.3	-3.7	-1.2	0.8	16.2	16.2	1.2	0.0	31.3
ALP	12;7	3;1	-4.9	-0.9	-0.9	-1.2	41.5	31.7	1.5	11.8	17.9
Mean			-2.8	-2.4	-1.1	-0.6	38.8	30.3	1.5	13.5	26
SD			2.7	2.2	1.0	1.2	15.7	10.9	0.2	8.5	12.3

Notes: LoE = Length of Exposure, SentCpl = Sentence Completion, WRep = Word Repetition, CLS = Core Language Score (English), Sub = Rate of Subordination, Cplx = Rate of Complex Utterances, CDens = Clausal Density, DeepE = Rate of Deep Embedding, ER = Error Rate. Standardized test results (SentCpl, WRep, Vocab and CLS) were initially reported in Scheidnes and Tuller (2016).

^a Grey boxes indicate scores below age norms: ≤ -1.65 SD for the French tests, -1 SD for the CELF and -1 SD of the TD8&11 mean for clausal embedding measures and Error Rate.

Table S4. *Standardized Test and Clausal Embedding Measures in the L2 Group at T2.*

T2		Standardized test and spontaneous language measures (z-scores) ^a									
Child	Age	LoE	SentCpl	WRep	Vocab	CLS	Sub	Cplx	CDens	DeepE	ER
RHR	7;9	2;11	-0.4	0.9	-0.2	-0.9	48.3	40.0	1.6	17.2	30.6
PUS	8;1	3;8	-0.7	-1.16	-3.0	-2.8	24.5	20.8	1.3	7.7	6.8
ALC	8;4	2;7	-0.4	-0.1	1.4	0.1	33.3	28.2	1.4	15.4	17.2
LOS	8;4	1;10	-0.4	-1.2	-1.2	-0.3	38.6	26.3	1.5	27.3	57.4
ALJ	8;10	3;4	-2.7	-0.7	1.1	0.1	40.9	27.3	1.5	22.2	14.5
BEA	9;8	4;5	-3.1	-0.8	0.0	-0.4	31.1	26.7	1.4	14.3	14.3
IOC	9;9	4;8	0.4	-0.8	-1.2	-0.5	26.2	23.0	1.4	0.0	20.6
WRS	9;10	3;8	0.4	-1.3	0.8	-1.0	22.5	17.5	1.3	22.2	18.5
LEP	10;2	4;2	-3.8	-0.2	-0.8	-1.5	33.3	26.2	1.4	21.4	20.4
HAS	10;0	1;10	-4.4	-1.9	-1.7	-1.2	56.9	41.2	1.6	17.2	17.5
EMH	10;3	1;11	-1.8	-1.9	-0.8	-0.7	49.0	31.4	1.8	20.0	33.3
LAD	10;6	4;8	-2.4	-3.4	-1.7	-0.1	25.0	23.1	1.3	7.7	22.2
MER	10;10	2;11	-1.9	-1.6	-1.2	-0.8	56.4	30.9	1.6	35.5	18.2
HEA	11;1	4;5	0.8	-0.9	-0.2	-0.6	20.9	20.9	1.2	0.0	23.6
HOS	11;8	3;8	2.9	0.8	0.7	-0.1	28.1	21.1	1.3	12.5	8.2
SAJ	12;3	3;11	-3.0	-1.7	-1.8	-2.0	16.2	13.5	1.2	16.7	10.7
DAD	12;3	4;8	-0.7	1.0	-0.2	0.8	54.8	41.9	1.7	17.6	29.0
MAS	12;4	1;10	-1.0	-2.2	-0.2	0.3	31.6	24.6	1.5	11.1	50.9
LIB	12;8	4;11	-0.4	-0.2	0.7	0.0	35.4	33.3	1.4	5.9	3.2
RAG	13;1	4;11	0.2	-0.2	1.6	1.4	59.6	40.4	1.7	23.5	20.6
LOC	13;3	2;6	-1.6	-0.9	0.1	0.8	42.9	28.6	1.5	25.0	15.8
ALP	13;8	4;2	-2.8	-1.7	0.1	-1.4	13.7	11.8	1.2	14.3	23.3
Mean			-1.2	-0.9	-0.4	-0.5	35.9	27.2	1.4	16.1	21.7
SD			1.7	1.2	1.2	1.0	13.7	8.5	0.2	8.6	12.9

Notes: LoE = Length of Exposure, SentCpl = Sentence Completion, WRep = Word Repetition, CLS = Core Language Score (English), Sub = Rate of Subordination, Cplx = Rate of Complex Utterances, CDens = Clausal Density, DeepE = Rate of Deep Embedding, ER = Error Rate. Standardized test results (SentCpl, WRep, Vocab and CLS) were initially reported in Scheidnes and Tuller (2016).

^a Grey boxes indicate scores below age norms: ≤ -1.65 SD for the French tests, -1 SD for the CELF and -1 SD of the TD8&11 mean for clausal embedding measures and ER.