



A community based preliminary evaluation of LENA Start™: Promoting responsive parent-child interactions

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Introduction

- The language disparities originally observed by Hart & Risley (1995) observed between high and low SES homes is 'alive & well' (Golinkoff et al. 2018).
- Parents can implement language-based interventions effectively (Roberts & Kaiser, 2011).
- Greenwood et al. (2017) suggests adopting a multicomponent prevention approach to reducing language disparities that involves parents.

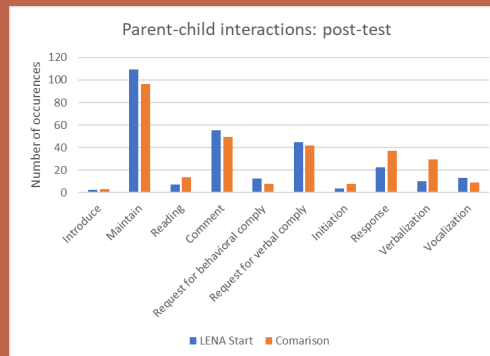
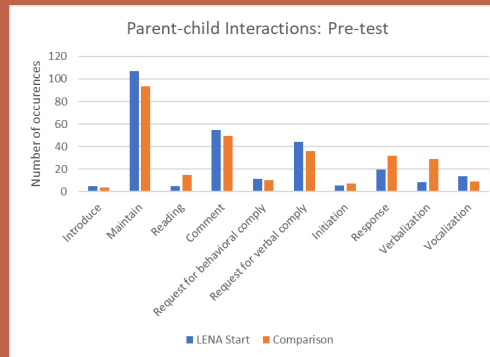
Study Purpose

- To evaluate the effect of LENA Start™, a parent education program that provides information on language development and quantitative feedback.
- To determine if there are differences in parent-child interactions, measured by parent-child freeplay observation, as a function of participating in LENA Start™?

Method

- Child Participants – 0 to 2;11
- Non-equivalent comparison group design
- Parent-child LENA Start™ dyad completed a 13 week training program targeting strategies to enrich home language environment
- Comparison parent-child dyad participated in regularly programmed ECFE classes
- Pre- and post-intervention videos were transcribed and coded, by blind to study transcribers and coders

Preliminary results indicate no differences in proximal measures of parent-child interactions as a result of participating in LENA Start™.



Results/Ammo Bar

Behavioral Coding Measures Based on Parent-Child Interaction – Group Comparisons

Adult Measures	Between Group Comparisons		
	g	t	p
Introduce	-0.19	-0.44	0.67
Maintain	-0.09	-0.26	0.79
Reading	0.05	0.05	0.97
Comment	0.15	0.45	0.66
Request for behavioral comply	0.06	0.16	0.88
Request for verbal comply	-0.48	-1.20	0.25
Child Measures			
Initiation	0.26	0.33	0.77
Response	0.07	0.11	0.91
Verbalization	-0.01	-0.02	0.99
Vocalization	0.23	0.58	0.58

Behavioral Coding Measures Based on Parent-Child Interaction – Within Group Comparisons

Adult Measures	Within Group Comparisons					
	LENA			Comparison		
	g	t	p	g	t	p
Introduce	-0.44	-1.10	0.29	-0.18	-0.40	0.70
Maintain	0.07	0.28	0.79	0.24	0.95	0.37
Reading	-0.68	-0.91	0.46	-0.47	-0.33	0.80
Comment	0.06	0.23	0.82	-0.09	-0.73	0.49
Request for behavioral comply	-0.03	-0.16	0.88	-0.21	-0.41	0.70
Request for verbal comply	0.02	0.14	0.89	0.84	1.73	0.13
Child Measures						
Initiation	0.03	0.33	0.80	-0.02	-0.09	0.93
Response	0.25	0.82	0.43	0.16	0.45	0.67
Verbalization	0.07	1.45	0.18	0.04	0.59	0.60
Vocalization	0.10	0.22	0.83	-0.31	-0.69	0.5

LENA Measures and Transcription Measures Based on Parent-Child Interaction – Group Comparisons

LENA Measures	Between Group Comparisons		
	d	t	p
Adult Word Count (Percentile)	0.37	1.03	0.31
Child Vocalizations (Percentile)	0.60	1.68	0.10
Conversational turns (Percentile)	0.58	1.67	0.11
SALT Measures			
Adult MLU	0.11	0.31	0.75
Adult mean turn length - utterances	-0.41	-1.27	0.22
Adult NTW	0.01	0.03	0.97
Child NTW	0.22	0.59	0.56

Discussion Questions

- Are parents able to generalize language-facilitating techniques across contexts?
- What measures should we use to evaluate parent-implemented interventions?
- Who should be delivering parent education programs?
- Should parent-implemented communication interventions target an array of language promoting strategies or a select few that are most likely to promote language development?

Use your phone's camera to find out more.

