The Language Environment Analysis (LENA) System: A Literature Review

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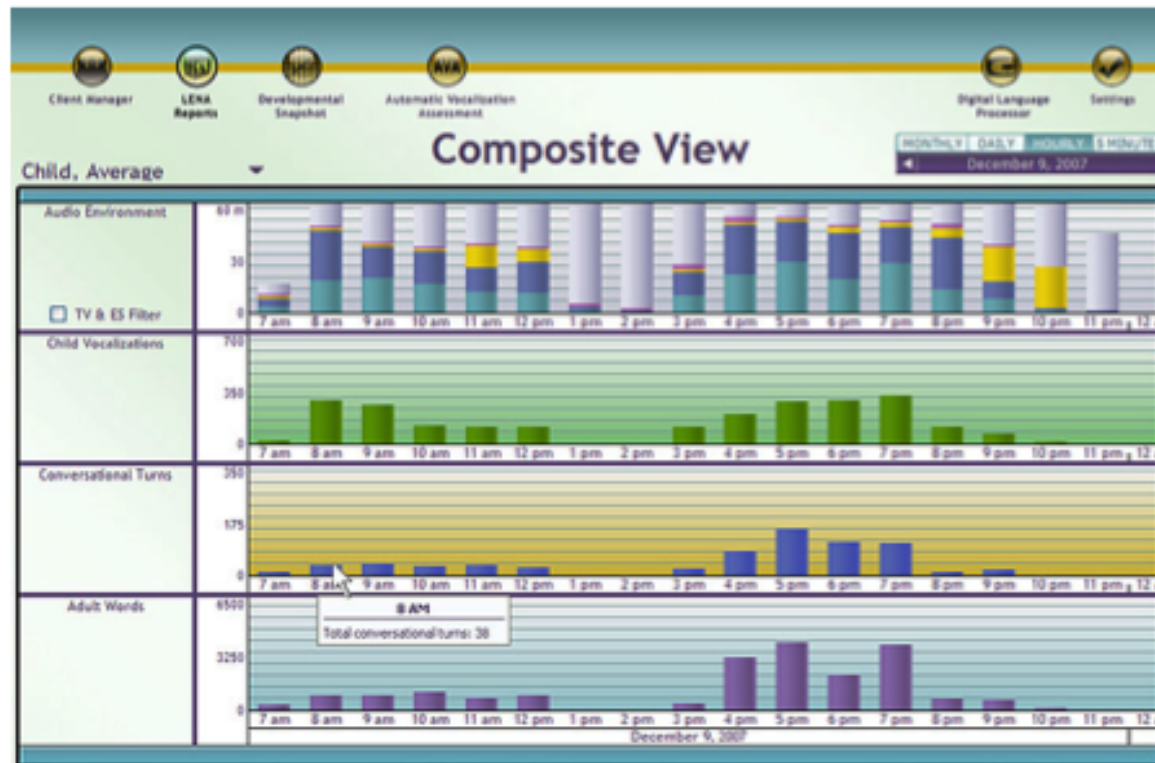
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Purpose

- To familiarize researchers and with both the LENA System device and its body of literature

Digital Language Processor

LENA Graphs

Data Collection

- Medline, PsycInfo, Google Scholar

- 38 articles

Review

METHODS	PARTICIPANTS
Study Type	Number of Participants
LENA Variables	Ages
Number of Recordings	Languages
Length of Recordings	Socio-Economic Status
Time Intervals Analyzed	Additional Needs
Additional Assessments	
Additional Software	
Transcription Software	
Human Coders	

Strengths

- Successfully collects full day recordings in a child's natural language environment

- Provides useful validated variables for numerous populations and ages

- Used in a variety of study designs and in conjunction with other tools

Considerations

- Occasionally mislabels segments

- 'Overlapping Sounds' label may hide some data

- Does not provide a transcription

- More normative data is needed

- New variables could be helpful (ie. Infant directed speech)

Moving Forward

- DARCLE   darcle.org
  - Pre-PI Level DARCLE   hillary.ganek@mail.utoronto.ca

- Homebank   homebank.talkbank.org

- LENA Research Foundation   lena.org