

BACKGROUND

Traditional Norm-referenced Assessments:

- Standardized test that measures an individual's knowledge/skills and compares it to the knowledge and skills of a normed group (i.e., representative sample)
- Common method used to collect data because it is inexpensive, simple to administer, and easy to score
- Limitations of using these assessments include biases towards speakers who do not match the normed dialect under investigation

Structured Photographic Expressive Language Test -3rd Edition (SPELT-3)

- Measures children's specific morphologic and syntactic structures
- Accounts for dialectal variations - but relies on clinician awareness

Language Sample Analyses:

- Naturalistic language productions that offer an immediate snapshot of children's grammatical complexity, utterance length, and vocabulary skills

Systematic Analysis of Language Transcripts (SALT)

- SALT is a software program that automates the process of eliciting, transcribing, and analyzing language samples
- Calculates mean length utterances in morphemes and words (MLU-M / MLU-W); Number of Different & Total Words (NDW/NTW); Type-Token-Ratio (TTR)

Computerized Language Analysis (CLAN)

- Data analyses program for analyzing transcriptions that were transcribed in CHAT format
- Calculates index of productive syntax (IPSyn) and developmental sentence score (DSS)
- IPSyn & DSS are less common because they are complicated to analyze. However, with the SALT2CHAT conversion, CLAN provides a streamlined automated analysis for obtaining IPSyn & DSS.
- Benefits of CLAN
 - "...human and CLAN IPSyn scoring point-to-point accuracy measurements yield a mean interagreement of 94%," (Sagae et al., 2010)
 - Can be used to analyze multiple transcripts simultaneously

PURPOSE

To describe the importance of the automation process for both SALT and CLAN for capturing LSAs and how LSAs compare to other assessments of expressive language to understand expressive language across preschoolers of varying linguistic backgrounds.

PARTICIPANTS



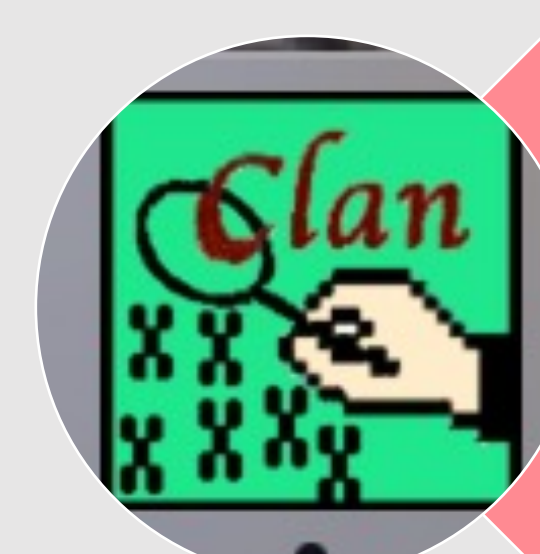
METHODS

- Each child completed the Diagnostic Evaluation of Language Variation to support the characterization of their primary dialect
- Children completed norm-referenced testing and 15-minute play-based language sample analyses in session counterbalanced by receptive and expressive language
- The SPELT-3 was scored accounting for dialectal variations
- Language samples were coded in SALT based on dialectal variations

EQUIPMENT



Systematic Analyses of Language Transcripts (SALT) program



Computerized Language Analyses (CLAN) program

Zoom Q8 Video-Audio Recorder

DATA ANALYSIS

- Data from LSAs were compared to standard scores from the SPELT-3 to better understand how these measures relate for a diverse range of preschoolers
- Spearman Analysis
- Planned correlation magnitudes classified according to Cohen (1988) as minimal ($0.1 < |r| < 0.3$), moderate ($0.3 < |r| < 0.5$), and strong ($|r| > 0.5$)

RESULTS

There were no statistically significant relationships between LSAs (i.e., MLU-M, MLU-W, NTW, NDW, TTR, DSS, IPSyn Noun, IPSyn Verb, IPSyn Q/N, IPSyn SS, Total IPSyn) and children's performance on the SPELT-3 ($r_s(5) = -.10$ to 0.87 , $p > 0.05$)

DISCUSSION AND CONCLUSION

The SPELT-3 may be a good assessment of expressive language abilities for children from culturally and linguistically diverse backgrounds. However, Speech Language Pathologists should still consider the benefits of LSAs for capturing specific aspects of grammatical complexity across speakers for obtaining a more holistic picture about their expressive language. Programs like SALT & CLAN should be considered to help streamline this process.

LIMITATIONS AND FUTURE CONSIDERATIONS

- Continued efforts to expand the sample size
- Considerations should be made regarding the cultural & linguistic mis-match between SLPs and clientele
- Larger sample size may support efforts to consider differences across dialects (i.e., AAE & SAE)

REFERENCES

