Research Question
How do children's scores on the DELV-NR compare with Language Sample (LS) analyses of the spontaneous language of the same children?

Description of the DELV
The DELV-NR is a comprehensive norm-referenced assessment of syntax, semantics, pragmatics, and phonology for children ages 3 through 8 years of age. It has several distinctive features:

- The syntax domain subscales are based on current research in language acquisition and generative linguistics, assessing deep syntactic knowledge of the speaker of sentences of structure.
- The semantics domain subscales do not assess specific acquired vocabulary, but focus on the organization of the child's lexicon and their ability to learn new vocabulary from syntactic and referential context (fast mapping).
- The pragmatics domain subscales assess functional skills in speech acts and narrative that are essential for early schooling and literacy development.

The DELV has been developed to provide an unbiased assessment of the language development of children who are speakers of African American English (AAE) or mainstream English (MAE).

Language Samples
- Recorded in interaction with the testing SLP around pictures and activities.
- Target = minimum of 100 non-invasive child utterances
- Narrative (picture-cued and open-ended)
- Exposition – how to make a favorite sandwich
- Problem-solving – violation of the child’s expectations
- Description of pictorial character's occupation
- General conversation
- Mean sample size = 175 utterances
- n samples less than 100 utterances, most analyses calculated with and without short samples

Quantitative Language Sample Measures
- # of Utterances
  - # of different words per 50 utterances (#words50)
  - Lexical diversity (LexD) (Miller et al., 2002)
  - IPSyn Sentence Structure (Scarborough, 1990)
  - LARSP % Complex Sentences (Crystal et al., 1989)
  - Extended Discourse Pragmatics Composite

Results: Correlations
1. DELV Raw Score Total by Quantitative LS Measures:

   - # children = 78
   - DELV Raw Score Total correlated with:
     - # Words per 50 utterances (.574)**
     - IPSyn Sentence Structure (.591)**
     - SALT MLU in Words (.489)**
     - LARSP % Complex Sentences (.295)**
     - LARSP Clausal Complexity (.339)**
     - r = .05**; p < .01; r^2 = .001

2. DELV Raw Score Total by Pragmatics Measures:

   - # children = 78
   - DELV Raw Score Total correlated with:
     - HOW -- Giving Directions (.529)**
     - NARR -- Picture Sequence Narrative (.519)**
     - CLEAN -- Referential Clarity (.369)**
     - MNTLST -- Mental State References (.451)**
     - LS PRAGMATICS COMPOSITE (.639)**
     - r = .05**; p < .01; r^2 = .001

   DELV Total Scores were significantly related to all of the Language Sample measures, especially Extended Discourse.

3. Language Measures by Age:

   - Age in months correlated with:
     - # Words per 50 Utterances (.129, p = .262)
     - IPSyn Sentence Structure (.116, p = .311)
     - SALT MLU in Words (.107, p = .349)
     - LARSP % Complex Sentences (.114, p = .320)
     - LARSP Clausal Complexity (.099, p = .397)
     - Pragmatics Composite (.344, p = .002**)
     - DELV Raw Score Total (.267, p = .018*)

THUS Quantitative LS measures showed no age progression BUT the DELV Total Score did show developmental growth between 5 and 6;11. Discourse Pragmatics also showed growth in this age range.

LI Categorization Disagreements
- 15 cases of disagreement between DELV and SLP
- 7 LI children (receiving speech services) pass DELV for 6/7 LS measures support DELV
- 2/7 LS measures low (average z-score = -2.5)
- 8 children not receiving services fail DELV for 4/8 LI measures z-scores > .15
- 1/8 borderline (DELV SS 74, mixed LS measures)
- 2/8 average LS measures EXCEPT very low Wdslms50
- 1/8 (DELV SS 73), but strong LS measures

- In only 215 cases are the LS measures discrepant with the DELV categorization of the children.

LI z-score Profiles

Case 1. DELV Pass (TD) and LS z-scores all above average

Case 2. DELV Fail (LI) and LS z-scores all way below average.

Case 3. Not so clear cut – DELV Fail, LS z-scores mixed.

Conclusion
1. DELV scores and many LS measures are strongly correlated.
2. The DELV is more sensitive to developmental growth between age 5 and 6;11 than various widely used quantitative LS measures.
3. DELV Passers score significantly higher than DELV Failers (r = 1.5 SD below) on a wide range of LS measures.
4. LS measures support the DELV over prior SLP LI and TD categorization for most cases of disagreement in categorization.
5. Thus the DELV provides a rich profile of syntactic, semantic, and pragmatic skills that is in keeping with children’s language in spontaneous speech.
6. The DELV provides similar diagnostic information to a detailed language sample analysis, but it is much quicker and more easily gathered and analyzed.

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