

What's the Meaning of Comprehension for Preschoolers? Pioneering Progress Monitoring Tools in a Disputed Domain

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Introduction

- The *Individual Growth and Development Indicators* (IGDIs) are general outcome measures used to monitor progress in preschool reading achievement.
- The current, widely used set of IGDIs includes measures of phonemic awareness and oral language but ignores other components of reading achievement (i.e. comprehension).
- If the IGDIs are used within a Response to Intervention (RtI) model to enhance preschool reading achievement, it is important to measure comprehension in order to modify instruction according to current level of performance.
- Yet, few can agree on a definition of comprehension at the preschool level, and few assessment tools are available.
- This poster describes the process used to develop and research a battery of comprehension IGDIs.

Method

- A comprehensive literature review was completed.
- An operational definition of comprehension was developed and used to generate ideas for observable and measurable child behaviors.
- Four IGDI formats were designed, piloted, revised, and subjected to field testing with a small sample of preschoolers (n = 41).
- Children were given the IGDIs and a criterion measure, the *Clinical Evaluation of Language Fundamentals - Preschool, Second Edition* (CELF-P2).

Operational Definition

Three essential components of comprehension:

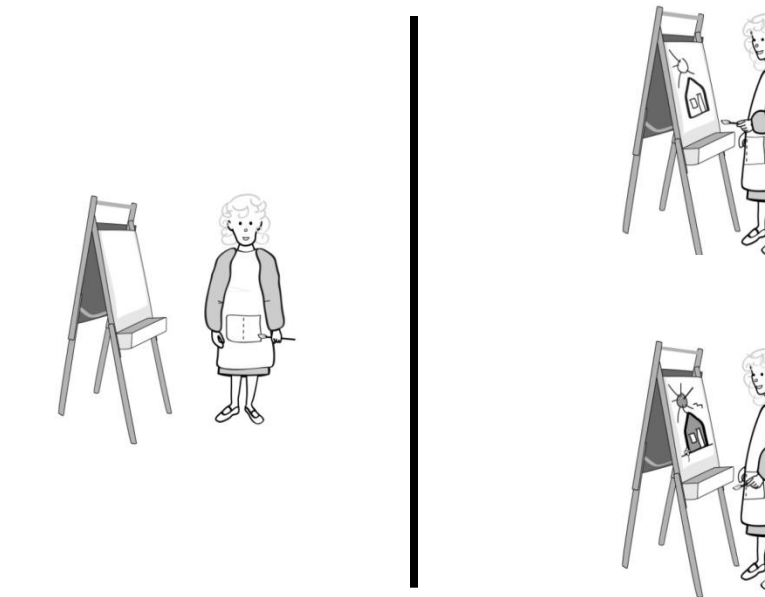
- Text comprehension - the process of gaining meaning from written language, pictures, and symbols.
- Listening comprehension - the understanding of spoken language.
- Inferencing - the process of filling in information that was neither seen nor heard explicitly.

Picture Comprehension



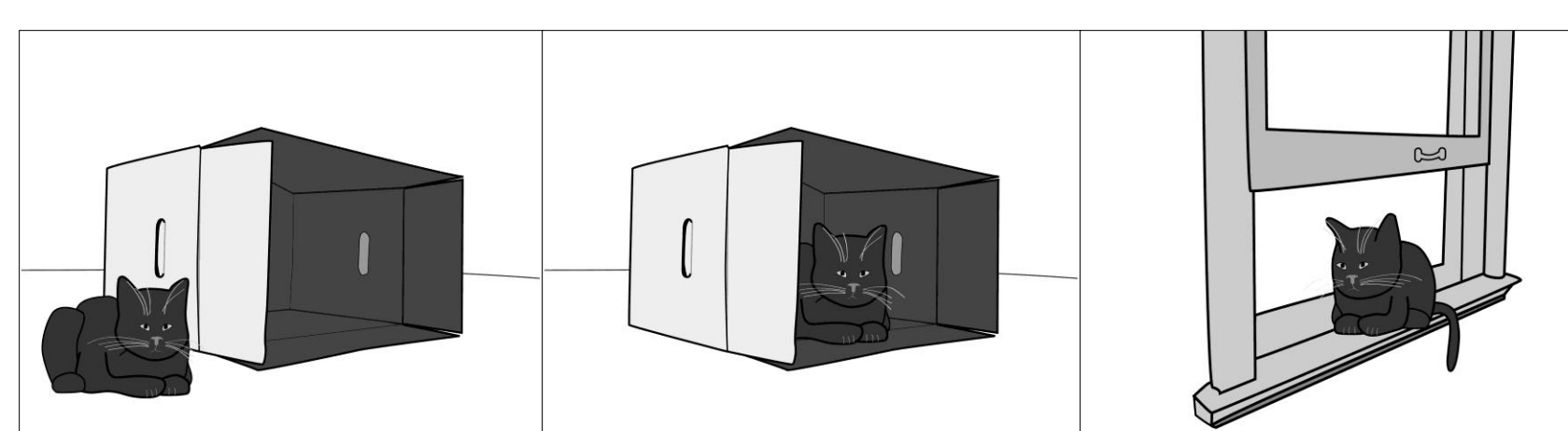
Where is she going?

Sequencing



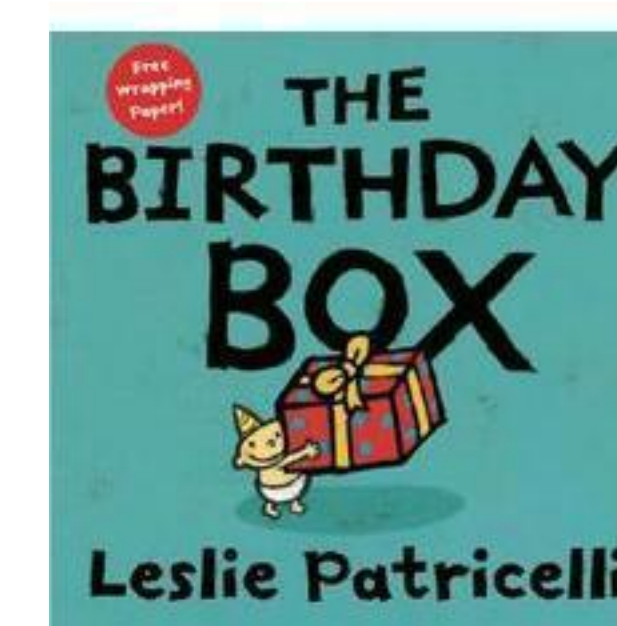
Which one comes next?

Sentence Comprehension



The cat is out of the box.

Story Comprehension



Why were they tired?

Results Continued

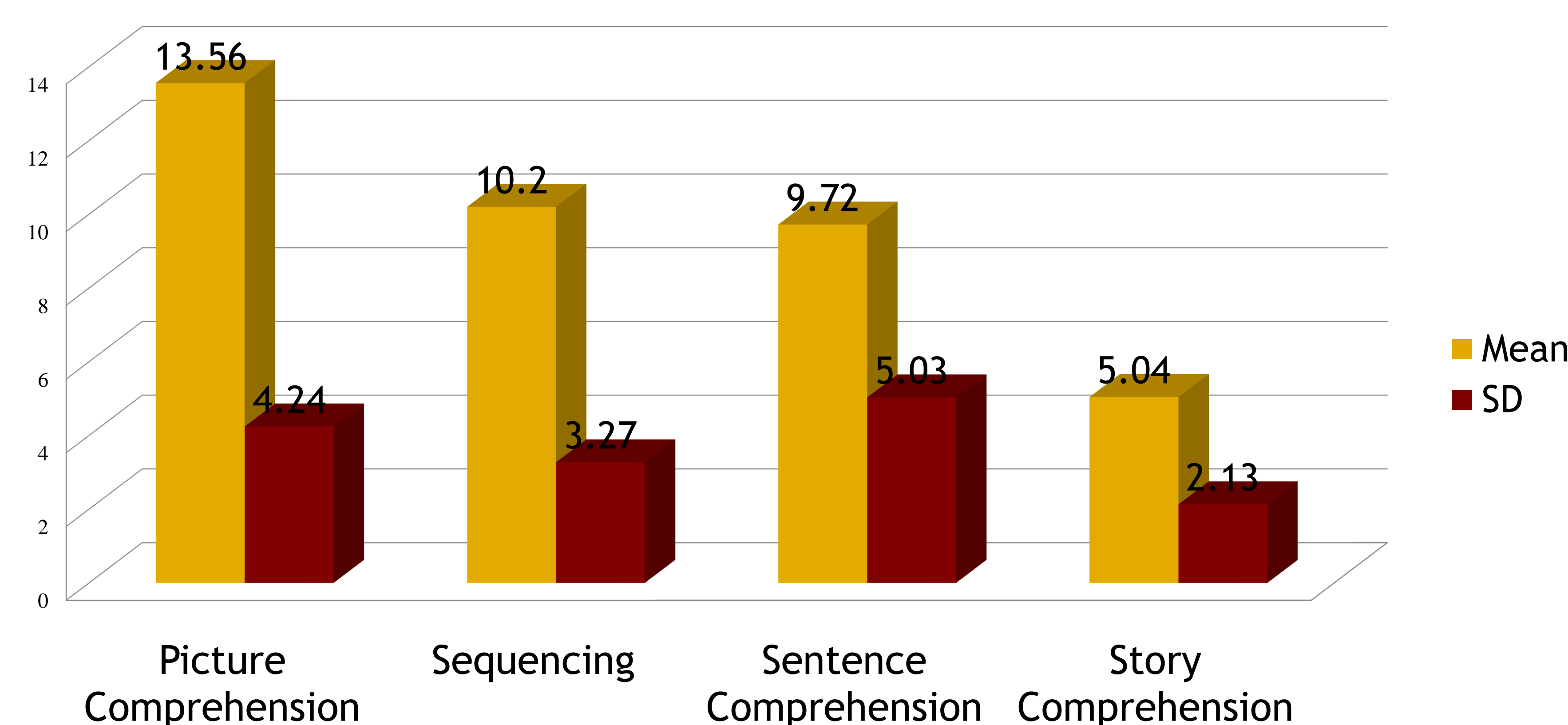
- All four IGDIs were moderately correlated with age ($r_s = .47-.61$).
- Sequencing, Picture Comprehension and Sentence Comprehension all demonstrate promise in assessing comprehension with preschool aged-children. These three measures were the most robust and were selected to undergo further development and research.

Correlations with Criterion Measure

	CELF-P2 Subtests		
	Sentence Structure	Word Structure	Expressive Vocabulary
Picture Comprehension	.43**	.54**	.66**
Sequencing	.44**	.17	.41*
Sentence Comprehension	.64**	.55**	.58**
Story Comprehension	.46*	.60*	.66**

*Correlation is significant at the .05 level.
**Correlation is significant at the .01 level.

Means and Standard Deviations of Total Scores on IGDIs



Results

- A slight ceiling effect was observed for Story Comprehension.
- Picture Comprehension, Sequencing and Sentence Comprehension demonstrated normal distributions and minimal ceiling effects. Additionally sequencing was without floor effects.
- Story Comprehension yielded limited variability in total scores, as a result a limited sample was used to assess its utility (n=26).

Discussion Questions

- What does comprehension mean for children who are not yet reading?
- How well do assessments of comprehension fit within a general outcome measurement model?
 - Is fluency an adequate indicator of comprehension?
 - How can comprehension be measured in 2 minutes or less?
- To what extent is comprehension distinguishable from oral language at the preschool level?
- Are preschoolers able to use inferencing, and how does this ability relate to cognitive development?

