

Noun Phrase Elaboration by Children with Language Impairment

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Introduction

- Elaborated noun phrases (ENPs) are suggested as sensitive indicators of linguistic growth in the school years (Nippold, 1998; Perera, 1986; Westby, 2005)
- Eisenberg et al. (2008) reported an increase from age 5 to 11 years in the number of children producing ENPs in oral narratives.
- Loban (1976) reported that children with high language ability produce twice as many ENPs involving post-modification as children with low language ability

- Greenhalgh & Strong (2001) reported a statistically significant but small difference in usage frequency for ENPs between TD and LI children.
- However, Eisenberg, Hsu, & Gillam (2007) did not find a significant difference in usage frequency from age 5 to 11 for ENPs involving pre- or post-modification.

Predictions

1. That PRESENCE of each NP type with more than a single pre-modifier would be lower for the LI group than for same-age typically-developing (TD) children and would more closely match usage by younger TD children.
2. That FREQUENCY of usage for each NP type would not be significantly different from either same age or younger TD children.

Language Impaired (LI) group

- age 8 ($n=26$)
- qualified for speech-language services in their schools
- TOLD composite ≤ 1.25 standard deviations below mean
- non-verbal IQ > 70 with no gross neurological, hearing, or emotional conditions

Typically developing groups

- Samples obtained during norming of the *Test of Narrative Language* (Gillam & Pearson)
- Age match: 8Y ($n=26$)
- Language match: 5Y ($n=26$)
 - Matched for number of T-units & MLU to LI group
- Matched by gender to LI group

Procedure

- Seen individually at their school for one 20- to 30-minute session
- Asked to tell a story
 - **SEQUENCE**: About a series of 5 pictures (boy having trouble getting ready for school)
 - **SINGLE**: about a fantasy picture (two children seeing an alien family landing in a park)

Transcription

- Transcribed in SALT format into T-units.
 - defined as one independent clause and any dependent constituents, including clauses and phrases (Hunt, 1965).
 - Only on-topic T-units were included (i.e., only language centered on the pictured events).
- Only narratives that were at least two independent clauses in length were included (minimal narrative, Labov, 1972)

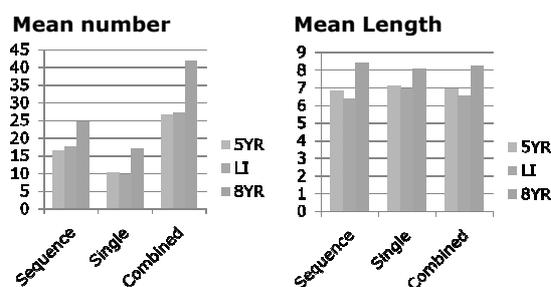
Analysis for 4 noun phrase types

- **PRE1**: Simple designating noun phrases include 1 element before the noun.
- **PRE2**: Simple descriptive noun phrases include 2 elements before the noun.
- **PRE3**: Complex descriptive noun phrases include 3 or more elements before the noun.
- **POST**: Complex noun phrases with post-noun modification include a clause or phrase after the noun.

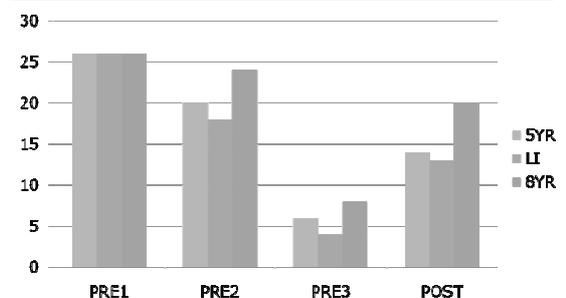
Measures

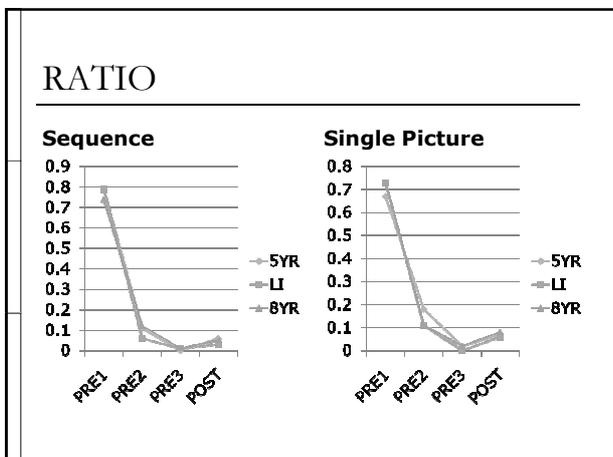
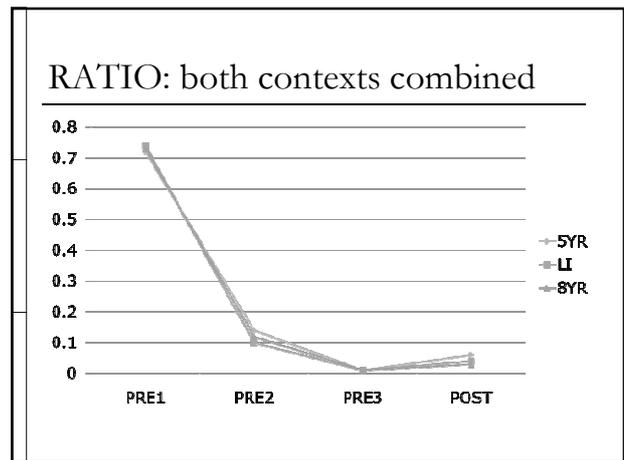
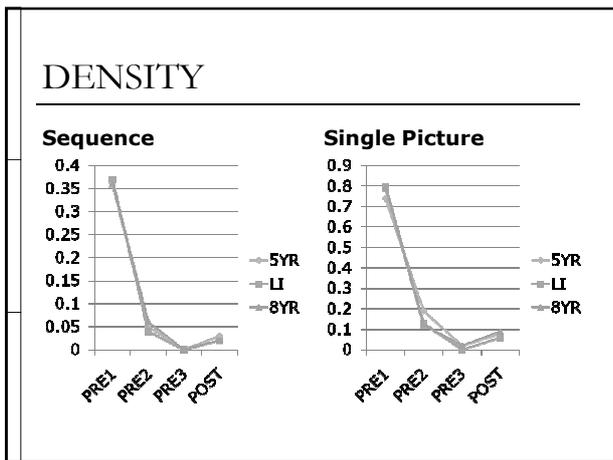
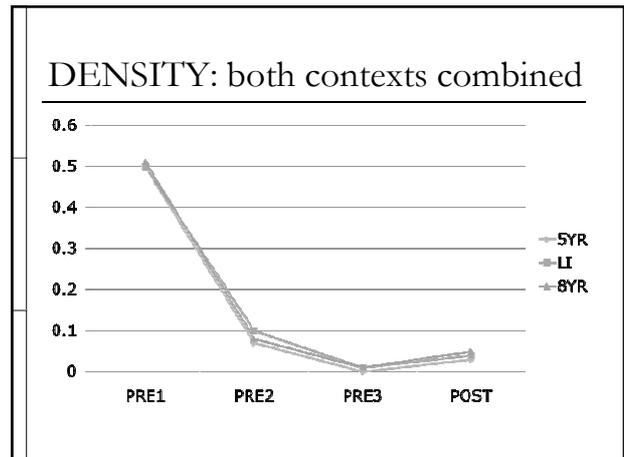
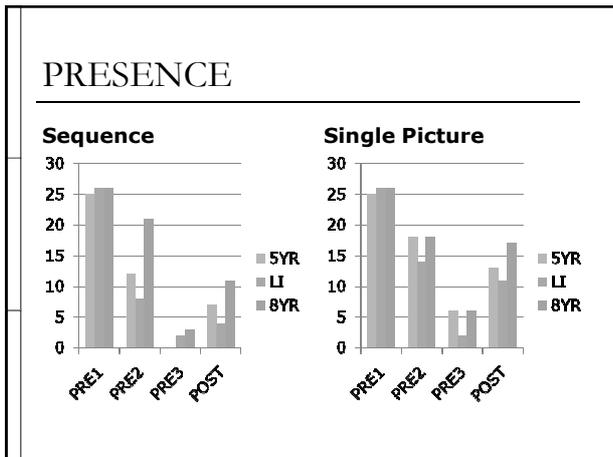
- **PRESENCE**: the percentage of children who produced each NP type at least once
- **DENSITY**: the number of occurrences divided by the number of T-units
- **RATIO**: the number of occurrences divided by the total number of NPs

T-units



PRESENCE: both contexts combined





Summary

- Fewer of the LI children produced ENPs than same aged TD children.
- The number of LI children producing ENPs was similar to that of younger language matched TD children.
- There was no difference among the groups in frequency of usage for each NP type.

Summary

- The profile of usage across NP types was the same for all three groups
 - PRE1 was most frequent, followed by PRE2 and POST, with little or no use of PRE3
- LI children showed the same context effect as the TD groups:
 - More children produced PRE2, PRE3, & POST in the single picture context.
 - Higher frequency of usage for PRE2, PRE3, & POST in the single picture context.

Implications

- Frequency of ENP usage may not be a clinically sensitive measure for identifying children having difficulty with NP elaboration.
- Once children produce NP elaboration, frequency of usage reflects factors other than language ability.
- What is clinically important is whether or not a child produces NP elaboration, particularly, in the single picture context.

Thoughts regarding therapy

- A single picture context fosters NP elaboration but provides less of a scaffolding context for achieving the narrative genre.
- A picture sequence scaffolds narration but does not foster NP elaboration.
- Hypothesis: Targeting NP elaboration in a picture sequence context may be more likely to achieve generalization of NP elaboration to other contexts.

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