4-7-2016

The Elicitation Method for Past Tense Verb production in Children with Specific Language Impairment and Typical Language

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Citation Information

Geise, Morgan; Green, Heather; Hart, Olivia; Leitnaker, Abbi; and Proctor-Williams, Kerry. 2016. The Elicitation Method for Past Tense Verb production in Children with Specific Language Impairment and Typical Language. Poster Presentation. *American Speech-Language-Hearing Association Convention*, Philadelphia, PA. http://submissions.mirasmart.com/asha2016/Itinerary/ItinerarySubmissionDetail.aspx?sbmID=2007

The Elicitation Method for Past Tense Verb production in Children with Specific Language Impairment and Typical Language

Session #: 8632
Day/Time: Friday, November 18, 2016 (10:30-12:00)
Title: Elicitation Method & Past Tense Production in Children With Specific Language Impairment & Typical Language
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Purpose of Study:
Regular (e.g., jumped) and irregular (e.g., fell) past tense verb acquisition in children with typical language development (TL) occurs between ages 3-5. In children with specific language impairment (SLI), acquisition of these forms is extended and errors in spontaneous conversation may even continue into adulthood. There is a lack of consensus as to whether probed or spontaneous language samples give a more accurate representation of a child's linguistic skills. The first aim of this study was to determine if there were differences in regular and irregular past tense verb production accuracy between two Elicitation Methods: probed vs. spontaneous language sampling.between children with SL and children TL. The second aim was to determine if accuracy and error patterns differed between children with SLI and children with TL.

Research Questions:

1. Is there a difference in the percentage of past tense error types by elicitation method for children with SLI and TL?
2. Is there a difference in past tense accuracy by elicitation method for children with SLI and TL?

Participant Characteristics:

- SLI group: 7 Caucasian boys and 4 Caucasian girls
    - Age range: 49-82 months
    - SES: Middle Class
- TL group: 8 boys and 12 girls
    - 17 children parent-identified as Caucasian, 1 as African-American, and 2 as mixed African-American and Caucasian
    - Age range: 36-57 months
    - SES: Middle Class

Methods:

Language Sample Data Collection

- Examiners read two books to the participants, one in the present tense and one in the past tense. Participants were asked to retell these stories to the examiner.

- One book was presented for the participants to make up a story based on the pictures with tense free to vary. These story retells were used to assess accuracy of past tense verb production in spontaneous language samples.
- Sessions were audio recorded and the children's oral narratives were transcribed by master's level SLP students. Consensus method of transcription was implemented in which a second reviewer reviewed original transcription and made note of any errors. If errors could not be resolved, a third party was brought in. Words that could not be resolved were marked unintelligible.

Probe Data Collection

- Used the regular and irregular past tense production from the Past Tense subtest of the TEGI

Statistical Design

- Mixed model ANOVAs with Elicitation Method as within factor and Group as a between factor
- Planned comparison follow-up used t-tests and Mann-Whitney U test as appropriate
- Dependent variables: regular and irregular accuracy; regular and irregular proportion of error types

Results:

Question 1:

Regular Past Tense

There was no statistically significant main effect for Group or an interaction, however there was a statistically significant main effect for Elicitation Method, $F(1,27)=32.04$; $p<.0001$. All participants produced more stem form errors on the TEGI probe than on the language samples.

Irregular Past Tense

Stem form errors: There was a statistically significant main effect for Group, F (1,29)=54.86, and Elicitation Method, F (1,29)=26.66, moderated by a Group by Elicitation Method interaction, F (1,29)=4.52. Post hoc testing using Tukey's HSD for unequal N revealed the following:

- Children with SLI produced more stem form errors on the TEGI than the LS ($p<.0001$)
- Children with SLI produced more stem form errors than TL on the TEGI ($p<.0001$)
- Children with SLI produced more stem form errors on the TEGI than TL did on the LS ($p<.0001$)

Over-regularization: There was a statistically significant main effect for Group, F (1,29)=26.00, and Elicitation Method, F (1,29)=7.11 moderated by a Group by Elicitation Method, F (1,29)=4.68 interaction. TL participants produced significantly more over-regularization errors

on the TEGI than in the LS ($p<.0001$). SLI did not differ in production of over-regularization errors on the TEGI and the LS

Question 2:
There was no significant main effect for Group or an interaction, however there was a significant main effect for Elicitation Method. All participants produced more regular past tense forms correctly in the language samples than on the TEGI probes (Irregular past tense correct: $F(1,29)= 38.39$; $p<.0001$. Regular past tense correct: $F(1,27)=23.29$; $p<.0001$).

Discussion:

- As expected, children with SLI performed as well as children with TL because they were language matched
- Children produced regular past tense more accurately in spontaneous speech than on probes, consistent with the findings of Rice et al. (1998)
- Children are more likely to produce verbs that are more familiar to them in spontaneous speech. Rice and colleagues propose that children are more likely to produce verbs that are familiar to them
- Additionally if a child produces a verb accurately once, there is a high probability that they will use the verb accurately a second time (e.g., one participant produced *dreamed* correctly 3 times throughout sample)

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