



Effects of verb familiarity on finiteness marking in children with SLI



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Abstract

Children with Specific Language Impairment (SLI) demonstrate deficits in finiteness marking and the verb lexicon. This study examines the proposal that these two deficit areas interact in children with SLI and/or typically developing children equivalent in either chronological age (AE) or general language level (LE). A total of 59 children completed an experimental sentence imitation task that manipulated verb familiarity while evaluating finiteness marking accuracy. The dependent variables were: overall sentence accuracy, deviations from the target sentence in finiteness marking and deviations in verb root imitation. Results indicated that verb familiarity affected finiteness accuracy for the LE and SLI groups only and familiar verbs conferred an advantage on overall imitation and verb root imitation for all groups. Findings suggest similarities between SLI and younger children in the role of verb familiarity on finiteness marking.

Research Questions

1. How do children with SLI compare to control groups of children on **overall sentence imitation** accuracy?
2. How do children with SLI compare to control groups of children on imitation of different grammatical elements?
 - a. Are children with SLI less accurate than comparison groups of children at **finiteness marking imitation**?
 - b. Are children with SLI less accurate than comparison groups of children at **verb root imitation**?
3. Is there an effect of verb familiarity on finiteness marking accuracy in children with SLI and control groups?

Predictions

On **overall sentence imitation** and **verb root imitation**, children with SLI are predicted to demonstrate similar accuracy compared to language-equivalent controls and less accuracy than age-equivalent controls. For **finiteness marking imitation**, children with SLI are predicted to be less accurate compared to both groups of control children. Less accurate finiteness marking imitation is predicted for unfamiliar verbs compared to familiar verbs for the children with SLI and language-equivalent controls.

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Methods

An experimental sentence imitation task was administered to three groups of children: 20 children with SLI (5-years old), 23 age-equivalent control children (AE; 5-years old) and 16 language-equivalent control children (LE; 3-years old). The sentence imitation task generated estimates of children's finiteness accuracy under two levels of verb familiarity - familiar real verbs vs. unfamiliar real verbs - in clausal sites marked for finiteness.

Imitations were coded and analyzed for **overall sentence accuracy**, **verb root imitation accuracy**, **finiteness marking imitation accuracy** and other deviations from the target sentence.

Noun phrase The girl	Verb root hide	Finiteness marking s	Verb phrase her doll
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Percent correct imitation was calculated for each dependent variable using the following formula:

Number of correctly imitated items/Total number of opportunities for correct imitation

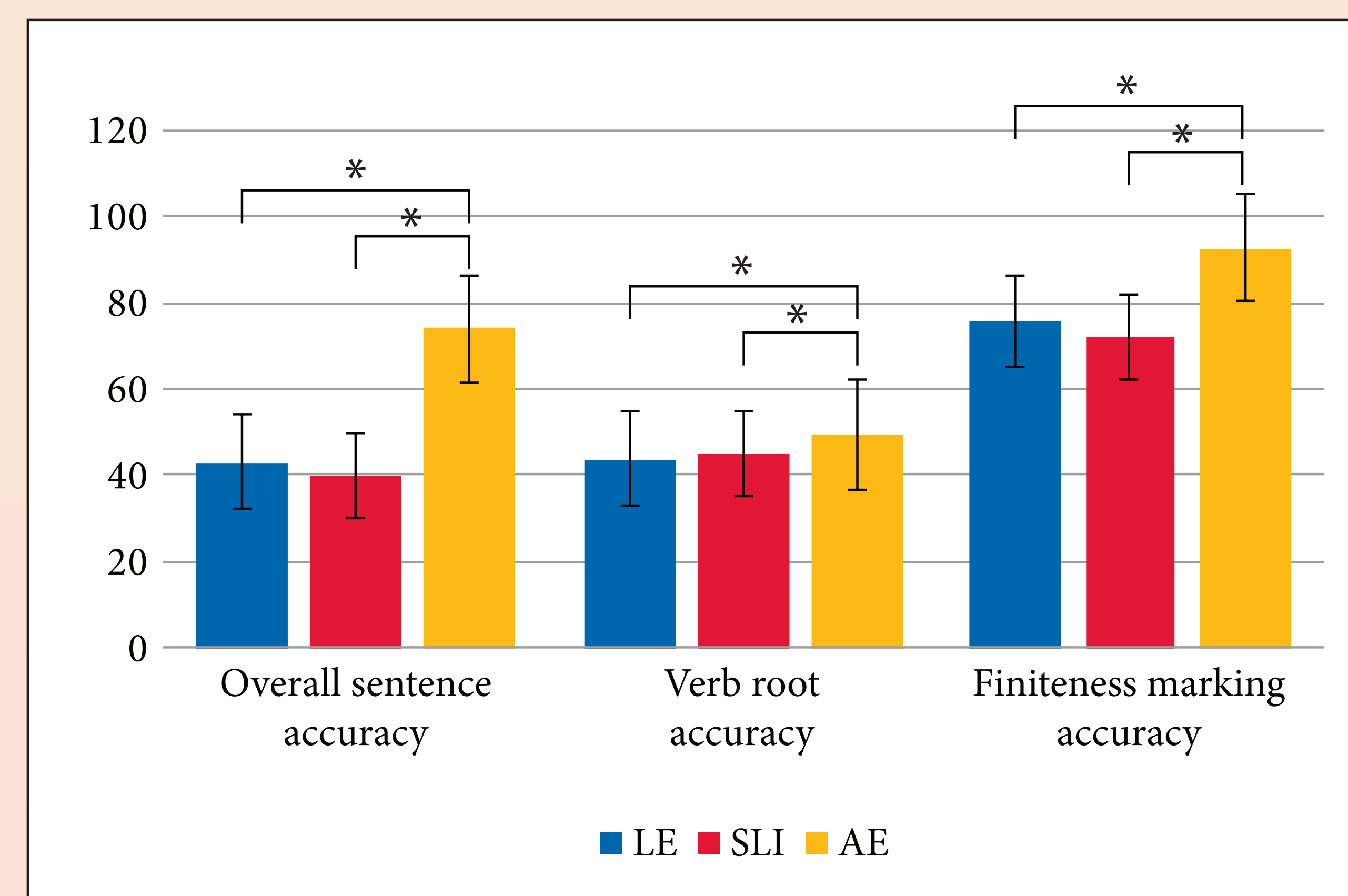
Results

Questions 1 and 2

Table 1: Mean (SD) percent correct dependent variables

	LE (n = 16)	SLI (n = 20)	AE (n = 23)
Overall sentence accuracy	43.2 (23.7)	40.1 (21.3)	74.1 (12.5)
Verb root imitation accuracy	43.8 (4.8)	44.9 (5.8)	49.5 (4.2)
Finiteness marking imitation accuracy	75.7 (21.8)	71.8 (25.2)	92.7 (6.1)

Figure 1: Mean percent correct dependent variables

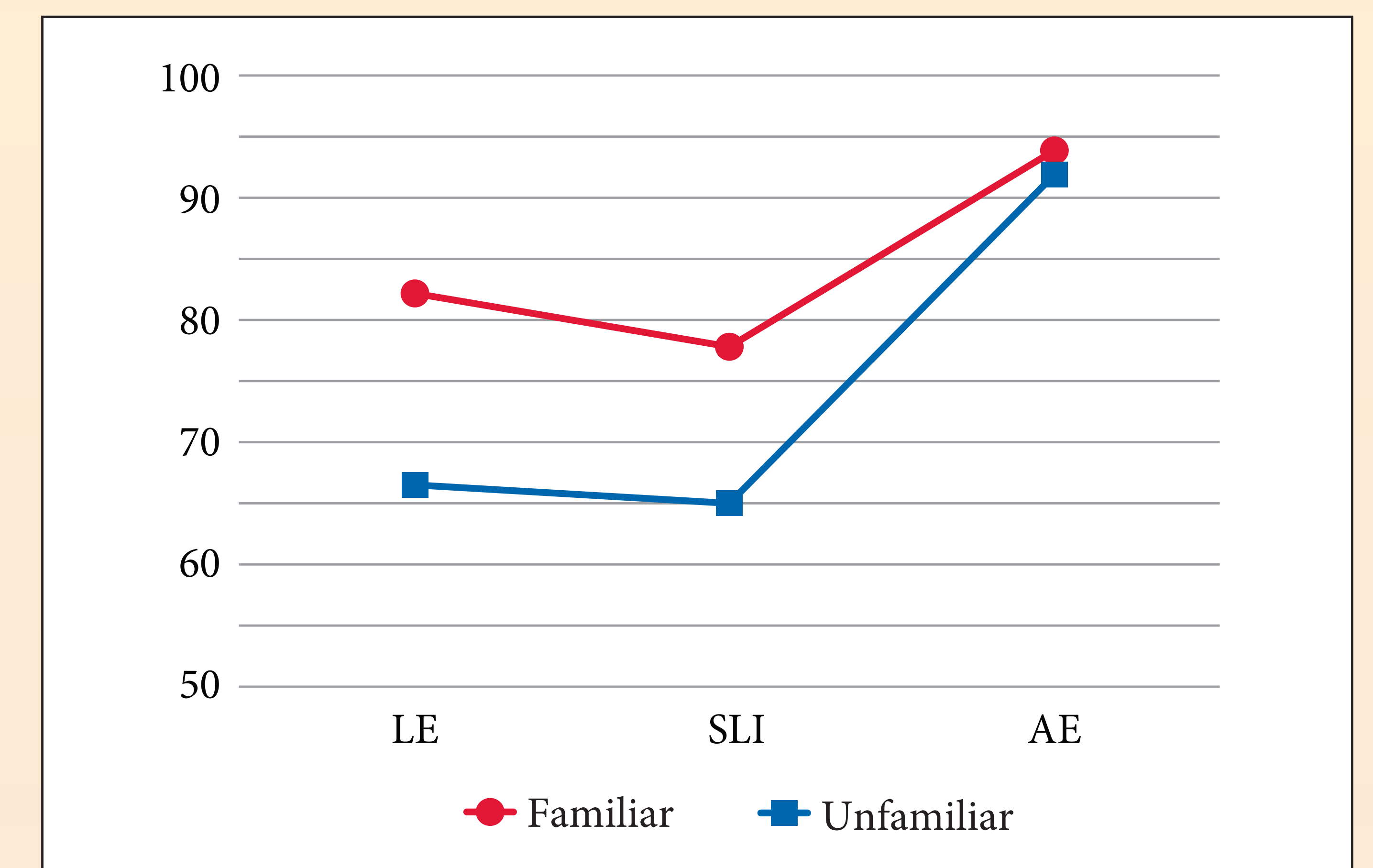


Question 3

Table 2: Mean (SD) percent correct **finiteness marking imitation accuracy** in obligatory contexts by verb type

	LE (n = 16)	SLI (n = 20)	AE (n = 23)
Familiar verb	82.2 (19.8)	77.8 (24.9)	93.6 (6.8)
Unfamiliar verb	66.5 (30.6)	65.3 (28.8)	91.8 (7.2)

Figure 2: Mean percent correct **finiteness marking imitation accuracy** in obligatory contexts by verb type



Discussion and Conclusions

- As predicted, the SLI group accuracy was similar to the LE group and less than the AE group on **overall sentence imitation** and **verb root imitation**
- SLI group was also similar to the LE group on **finiteness marking imitation**, which was not predicted
 - The SLI group may have benefited more from the imitation context more than the LE group
- Finiteness marking was more accurate for familiar verbs compared to unfamiliar verbs for the SLI and LE groups only
 - Hearing an unfamiliar verb negatively affects finiteness marking accuracy for the SLI and LE groups
- Implications: Intervention with children with SLI should explore introducing finiteness marking with familiar verbs first, then moving to less familiar verbs.