

Object Clitics in Spanish Speaking Children with and without SLI

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Background

In contrast with English, Spanish-speaking children with SLI have more difficulty producing direct object pronouns (clitics) than finite verb morphology (Bedore & Leonard, 2001; Bosch & Serra, 1997; Jacobson & Schwartz, 2002).

- **Representational-based theories** of SLI predict object clitics to be specially affected/disrupted in development (Extended Optional Infinitive/Unique Checking Constraint: e.g., Rice, 2003; Wexler, 1998, 2003).

SLI < MLU, SLI < AGE for suppliance
Errors mainly of omission

- **Processing-based theories** of SLI predict object clitics to be delayed in development (Surface Hypothesis/Generalized Slowing Hypothesis: e.g., Leonard, 1998, Miller et al., 2001).

SLI = MLU, SLI < AGE for suppliance

SLI = MLU, SLI < AGE for access limitations in production

Research Questions

- (1) Can object clitics be characterized as a disrupted or merely delayed aspect of SLI in Spanish?
- (2) Do children with SLI display access limitations with object clitics similar to younger, normally-developing children?

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Method

Participants

Group	Number	MLUw	AGE (months)
SLI	10	2.88	63.50
MLU	10	3.06	45.80
AGE	10	3.76	60.90

SLI = Specific Language Impaired, *Instituto Nacional de la Comunicación Humana*, Mexico City (Diagnostics- BELE <1.5 SD below age on 2 out of 4 subtests, no hearing impairment, no neurological impairment, nonverbal-IQ within normal ranges, verbal-IQ below age expectations).
MLU = Normally developing children, *CENIDI-UAM Iztapalapa*, *CENIDI-Hospital Dr. Manuel Gea González*, Mexico City.
AGE = Normally developing children, *CENIDI-UAM Iztapalapa*, *CENIDI-Hospital Dr. Manuel Gea González*, Mexico City.

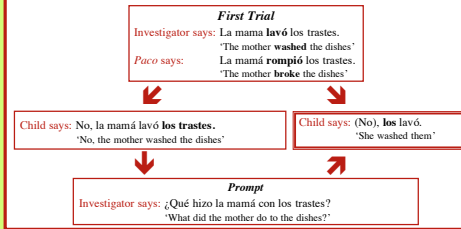
Spanish Direct Object Clitics

	Number		
	Sing	Plural	
Gender			
Masc	LO	LOS	
Fem	LA	LAS	

Procedures

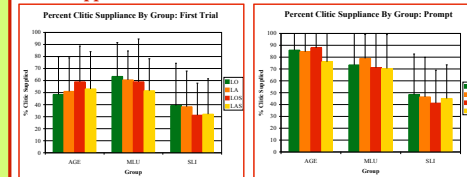
- (1) 15-20 minutes of free play for MLU calculation
- (2) Clitic Elicitation Task

A child was invited to listen to a story acted out by one investigator with toys. Another investigator operated a puppet, *Paco Culebra*. The child was told that *Paco* likes to repeat words that he hears in stories, but *Paco* cannot hear very well so he sometimes repeats the words right and sometimes wrong. When the puppet erroneously repeated a word, the child was asked to correct him. If the child did not use a clitic in their correction, they were given a prompt.



Results

Clitic Suppliance



Two-way ANOVA on Prompt [Group (Between = 3) X Clitic Type (Within = 4)]: $F_{(2,27)} = 7.034, p < .004$; $F_{\text{Group} \times \text{Clitic}} = 6.81, p > .05$. Post hoc Fisher's PLSD showed AGE = MLU, SLI < AGE, MLU.

Differences Between Trial and Prompt on Clitic Suppliance Across Gender

	Clitic Type		
	Trial	Prompt	Difference
AGE	53%	84%	31%
MLU	59%	73%	14%
SLI	35%	45%	10%

Error Analysis

Percentages and (Frequencies) of Omission and Substitution Errors for SLI Group

Error Type	Clitic Type	
	Sing	Plural
Omission Errors	44 (20)	26 (15)
Substitution Errors	56 (25)	74 (42)

$\chi^2 = 3.667, p < .05$

Percentages and (Frequencies) of Substitution Errors for SLI Group

Error Type	Target Type			
	LO	LA	LOS	LAS
Gender error	77 (10)	75 (9)	5 (1)	5 (1)
Number error	0 (0)	0 (0)	65 (13)	68 (15)
Gender and number	0 (0)	8 (1)	30 (6)	9 (2)
Ind.object (to/les)	23 (3)	17 (2)	0 (0)	18 (4)

Summary of Results

- For clitic suppliance after prompt: SLI < MLU = AGE
- No significant difference in suppliance rate for different clitic types
- Between first trial and prompt, AGE doubled clitic suppliance rate, however, SLI and MLU only increased slightly
- Similar percentage of omission and substitution errors across clitic types for SLI (omission = 44% vs. substitution = 56%); significantly more substitution errors for plural clitics
- Substitution errors tended to be of "one feature", i.e., gender errors for singular clitics and number errors for plural clitics. One exception was substitution of LA for LOS

Discussion

- Similar to other researchers on Spanish SLI, we found that the children with SLI performed worse than MLU-matched and AGE-matched children in suppliance of clitics (Bedore & Leonard, 2001; Bosch & Serra, 1997; Jacobson & Schwartz, 2002). Clitic type made no difference in suppliance (Jacobson & Schwartz, 2002). The error patterns were very similar to findings of Bedore & Leonard (2001).
- Results give partial support for both theories. In support of representational theories, and in contrast to processing theories, the children with SLI performed worse than their MLU-matched peers. In support of processing theories, the children with SLI appeared to have similar access limitations to the MLU-matched children, and more limitations than age-matched children. Contrary to representational theories, errors were not mainly errors of omission.
- It is possible that there is both a disruption and access limitation component to the acquisition of object clitics in Spanish-speaking children with SLI.

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