Language Exposure: Do Spanish and English proficiency and use influence sentence acceptability?

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Background

● Knowing the grammar rules of a language allows individuals to discriminate between grammatical and ungrammatical sentences in a language.
● When someone knows two languages, the grammatical rules of each language sometimes mismatch.
● During language comprehension, it is possible that bilinguals either: a) use only the grammar rules for the appropriate language context. b) use grammar rules from either language when interpreting sentences in either language.
● We previously found that the second language grammar is accessible when interpreting sentences in the first-learned language (Higby, 2016).
● In the current study, we investigated whether language proficiency and/or language use affect the degree to which this cross-linguistic influence occurs.

We predicted that frequent reading in the native language but not social media would yield lower acceptability ratings in the native language, and that high Spanish and English proficiency would yield high ratings.

Research Question

Do Spanish and English language use and proficiency affect sentence acceptability in Spanish?

Methods

● Causative sentences (N = 48)

The girl jumped the horse over the fence during training.

[The girl] jumped the horse over the fence during training

○ The rider is denoted as the Causal agent of the event and the horse is the Agent because it is the one jumping.

○ This sentence is considered ungrammatical in Spanish because controlled motion verb actions do not permit an animate direct object. The subject is interpreted as the agent not the causal.

○ Filler sentences, which are grammatical. (N = 92)

○ Included different sentence structures

● All sentences and instructions presented in Spanish

● Sentences presented auditorily over speakers

Proficiency & Use Measures

Proficiency

● Self-rated language proficiency in each language

○ Six language skills: listening comprehension, speaking fluency, reading comprehension, writing fluency, vocabulary knowledge, and grammatical knowledge

○ Scale: 1 (not at all proficient) to 7 (highly proficient)

○ Can-Do Questionnaire

○ Participants noted the amount of time they spent using each language in four language contexts: reading, watching TV, watching movies, and using social media.

Question: How often do you watch television in Spanish?

Never | Less than 1 day per week | 1-2 days per week | 3-4 days per week | 5-7 days per week

Sentence Ratings Task

● Naturalness judgment

Participants

41 Spanish-English bilinguals
16 Spanish monolinguals
Ages: 18-41 (m = 29.2)

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<td>r = .519 (p = .001)</td>
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<td>r = .405 (p = .151)</td>
<td>r = .197 (p = .509)</td>
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Results

Self-Rated Spanish Proficiency

Both bilinguals and monolinguals who rated themselves as more proficient in Spanish gave causative sentences higher ratings.

Spanish functional proficiency (CDQ)

Bilinguals: r = .519 (p = .001)
Monolinguals: r = .405 (p = .151)

English functional proficiency (CDQ)

Bilinguals: r = .054 (p = .844)
Monolinguals: r = .197 (p = .509)

English Reading

Time spent reading in English did not predict causative sentence ratings for bilinguals or monolinguals.

Functional use of English

Bilinguals: r = .243 (p = .131)
Monolinguals: r = .275 (p = .071)

Spanish Reading

Less frequent Spanish reading predicted higher causative sentence ratings for bilinguals, but no relationship was found for monolinguals.

Bilinguals: r = .541 (p = .051)
Monolinguals: r = .393 (p = .292)

Spanish Social Media

Time spent using social media in Spanish did not predict causative sentence ratings for bilinguals or monolinguals.

English Social Media

Time spent using social media in English did not predict causative sentence ratings for bilinguals or monolinguals.

English TV

Time spent watching TV in English did not predict causative sentence ratings for bilinguals or monolinguals.

Spanish TV

Time spent watching TV in Spanish did not predict causative sentence ratings for bilinguals or monolinguals.

English Movies

Time spent watching movies in English did not predict causative sentence ratings for bilinguals or monolinguals.

Spanish Movies

Time spent watching movies in Spanish did not predict causative sentence ratings for bilinguals or monolinguals.

Acknowledgments

Funding provided by a National Science Foundation Dissertation Improvement Grant (HCN-1526080) and the Mario Caponelli Dissertation Fellowship from the CUNY Graduate Center, a Doctoral Student Research Grant from the CUNY Graduate Center, and an Undergraduate Research and Mentoring Education grant from Queens College (CUNY) to E. Higby.

We thank Iris Strangmann, Stanley Chen, Ibana Vargas, Shintia Manzanarez, Andrea Monge, Dr. Loraine Obler, Dr. Valerie Shafer, Dr. Eva Fernández for help with experimental design, data collection, and analysis.

CUNY Graduate Center, Student Research Day, March 24th, 2017