Introduction

Do lexical characteristics influence word learning by Spanish-speaking and English-speaking toddlers in the same way?

Methods

Bates-MacArthur Communicative Development Inventory Databases

- Checklist that parents use to indicate words their child knows
- Intended for children age 16-30 months
- Valid and reliable measure of word learning
- Spanish & English data available from cross-sectional normative samples http://www.sci.sdsu.edu/cdi/lexical_e.htm

- Analysis limited to nouns

Outcome Variable

Age of Acquisition: Earliest age when 50% or more of the children in the database knew the word

Linear Regression Results

- Spanish
  - Significant effects of:
    - Density
    - Length
    - Density x frequency

- English
  - Significant effects of:
    - Density
    - ~Frequency (p=0.053)
    - ~Density x frequency (p=0.063)
    - Density x length

- Significant interactions explored by performing a regression for words that were high versus low on selected variable

Predictor Variables

- Spanish variables identified using 175,000 word adult Spanish database (Sebastian Galles, et al., 2000) provided by Michael Vitevitch
- English variables identified using a 20,000 word adult English database (Nusbaum, et al., 1984) available at http://128.252.27.56/neighborhood/Home.asp
- Except for word frequency, which was taken from Moe, Hopkins, & Rush (1982)
- Neighborhood density
  - Number of words differing by one phoneme
- Word frequency
  - Number of occurrences in adult (Spanish) or child (English) speech
- Word length
  - Number of phonemes in transcription
- Density x Frequency
- Density x Length

Dissimilar to morphosyntactic impairments, which show language-specific expression

Spanish & English Differences

- Spanish words are longer than English (Perea, Gotor, & Miralles, 1988)
- According to Vitevitch & Rodriguez
  - 90% of Spanish = 2 to 3 syllable words
  - 80% of English = 1 to 2 syllable words
- Processing differences between Spanish & English
  - Spanish: adults recognize dense words more quickly than sparse (i.e., facilitation)
  - English: adults recognize dense words more slowly than sparse (i.e., competition)
- Adults process language differently depending on the characteristics of the language

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