Spanish Vocabulary of Monolingual and Bilingual School-Age Students

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Introduction

**Background**
- Dual Language Learners (DLLs) whose primary language is Spanish, accounted for 3.7 million students in the U.S., which represented 7.1% of all students in the U.S. (U.S. DOE, 2017)
- DLLs face expected challenges due to their reduced proficiency in the language of instruction and history suggests DLLs are disproportionally identified as needing special education services (Sullivan, 2011; Counts, Katsiyannis, & Whiffrid, 2018)

**Bilingual language development**
- DLLs’ language skills are dynamic and correlated to their use and exposure to each language (Bedore & Peña, 2008)
- When comparing both the language exposure and expressive vocabularies of monolingual and bilingual toddlers, results suggest that input molds vocabularies (Cote & Bornstein, 2014; Scheele, Leeseman, & Mayo, 2010)
- Bilingual child’s semantic abilities are often not accurately represented when only one language is considered at a time, and this is likely due to their distributed semantic abilities (Peña, Bedore, & Kester, 2016)

**Bilingual vocabulary literature**
- Most of the literature demonstrates monolinguals have larger receptive and expressive vocabularies than bilingual children; however, these discrepancies are often based on children’s production of the societally dominant language (e.g., English in the US) (Yan, Nicoladis, 2009; Biadystok, Luk, Peets, & Yang, 2010; Scheele, Leeseman, & Mayo, 2010)
- Although most of the literature has focused on comparing bilingual and monolingual children’s performance on the dominant language, there are some studies that suggest that the Spanish of bilingual children is lower than that of monolingual Spanish speakers (Hoff & Ribot, 2017; Cote & Bornstein, 2014; Altman, Goldstein, & Armon-Lotem, 2017; Nicoladis & Jiang, 2018)

**Bilingual language sample analysis literature**
- Language sample analysis is an important evaluation tool for bilingual children (Paul & Norbury, 2013)
- Previous work regarding bilingual children has found TD and children with language impairment consistently differ in the development of both their narrative macro- and microstructure during early schooling (Squires et al., 2014)

Current Study

Language Sample Analysis was used to address the following questions:
- Do Spanish-English bilingual children have significantly different Spanish vocabularies (NDW) during story retells in comparison with their same-aged Spanish monolingual peers?

Methods

**Population sample**
- Participants: Spanish-English Dual Language Learners (DLLs) and monolingual Spanish children in 1st or 2nd grade
- Language Samples: Retell of a Mayer Frog story in Spanish (FWAY, FOHO, FGTD, OFTM) selected from two larger parent studies (one bilingual parent study and one monolingual parent study)
- The study prescribed was different for each grade and semester
- Current Population Sample Selection: Smaller subset of monolingual students who retold each story in the respective Grade and Semester. Therefore, the bilingual data was randomized and sample size was matched to the monolingual sample size per story:
  - Grade 1 Fall Monolingual (N=58), Grade 1 Fall Bilingual (N=58), Grade 1 Spring Monolingual (N=34), Grade 1 Spring Bilingual (N=34), Grade 2 Fall Monolingual (N=127), Grade 2 Fall Bilingual (N=127), Grade 2 Spring Monolingual (N=123), Grade 2 Spring Bilingual (N=123)

**Procedures**
- Initial analysis performed to determine NDW:
  - Systematic Analysis of Language Transcript (SALT) analysis with respective referential databases: monolingual Spanish or bilingual Spanish
  - Descriptive and comparative analyses conducted:
    - Independent t-tests to determine significance
    - Cohen’s d calculated to determine effect size

**Measure**
- Number of Different Words (NDW): standard measure used as index for vocabulary

Results

![Table 1](image)

![Table 2](image)

**Discussion**

- Monolingual average NDW was significantly larger (p<.001) than bilingual average NDW across all grades and semesters
- These findings add new information to the field in regard to the Spanish NDW of bilingual children used in a natural linguistic task
- The results imply bilingual children also have smaller vocabularies in the societally non-dominant language
- Clinical implications include:
  - Better understanding of typical bilingual patterns in story retell context when considering the societally non-dominant language
  - Must consider the Spanish vocabulary of bilingual school-aged children may be lower than their monolingual peers
  - Importance of considering both languages when evaluating a DLLs’ language performance
  - Educating parents of DLLs about distributed knowledge and resulting potential expected smaller home language vocabulary when comparing the child with monolingual peers

References


