Three strong predictors of early language development and outcomes are SES, maternal input, and language exposure (Hoff, 2013). Most extant work on these predictors is limited to English speakers. The influence of these variables in other populations, even within the US, is unclear. The population of children between 5 and 17 years of age in the US who hear a language other than English at home has increased from 4 to 11 million from 1980 to 2009. 73% of children who hear a second language at home and have difficulty with English come from Spanish-speaking homes.

### Previous Findings

Vocabulary size in English- and Spanish-dominant children (L1≥80%, M = 17.2) varies with language exposure. However, SES and maternal input effects on vocabulary are obtained in English-dominant, but not Spanish-dominant, children at 16 months. (DeAnda, Poulin-Dubois, & Friend, in revised review)

### Measures

**Computerized Comprehension Task** (CCT; Friend et al., 2001, 2009; 2012)
- Child performance measure of vocabulary comprehension
- 41 trials of paired images on a touch screen
- Experimenter prompt “Where is the shoe? Touch shoe.” (“Donde esta el zapato? Toca zapato.”)
- English and Spanish adaptations demonstrate convergent validity with parent report and test-retest reliability

**Language Exposure Questionnaire** (LEQ; Brouillette & Sebastian-Galles, 1997)
- Intensive interview-style questionnaire
- Who interacts with the child, in what language and for how long
- Relative hours of maternal language exposure across L1 and L2

To further clarify the child care by SES interaction, we examined the type of child care arrangement across levels of SES. A chi-square test of independence revealed that type of outside care was related to SES at 22 months of age ($\chi^2 = 9.05, p = .04$), and marginally at 16 months ($\chi^2 = 6.96, p = .07$).

### references


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### discussion

At 16 and 22 months of age, maternal input and SES are unrelated to vocabulary size.

Language exposure effects on vocabulary size are present at 16 months of age but not at 22 months. Thus, children with second language exposure have significantly smaller vocabulary sizes than monolinguals at 16 months of age, but catch up to their monolingual peers 6 months later.

Preliminary analyses of vocabulary growth revealed an SES by outside care interaction such that low SES children in outside care exhibited little growth from 16 to 22 months. Indeed, early child care arrangements vary by culture and SES, such that care arrangements with relatives are preferred in low-income, Hispanic households (Phillips & Lowenstein, 2010).

Within Spanish-speakers, language environments differ across SES such that SES alone is not a significant predictor of the pace of vocabulary acquisition.

However, our results replicate previous findings in English-speakers (Oller & Eilers, 2002) demonstrating an attenuation of exposure effects on language with age. Indeed, within the current Spanish-speaking sample, second language exposure waned over time, such that Spanish-dominant children that are minimally exposed to a second language reach monolingual levels by 22 months of age.

Taken together, these findings suggest that the language environment of Spanish-speaking children may differ and also mirror that of English-speakers.

### method

**Participants**

63 Spanish-dominant (L1≥80%, M = 17.2) children from San Diego, CA. 54 of these participants returned approximately 6 months later (M = 23.16).

### future work

Maternal input and overall child-directed speech:
- How does child-directed input differ across English and Spanish speaking homes? How do these relate to SES?
- What input factors relate to oral language ability?

The course of language development:
- What is the course of development for Spanish-speaking preschoolers?
- How do early oral language abilities relate to school readiness in this population?
- What types of literacy activities do Spanish-speaking moms engage in with their children?

### acknowledgements

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