

Spanish Speaking Bilinguals' Use of Disambiguation in Their Heritage Language

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Background

- Disambiguation refers to the word learning heuristic of mapping a novel word to an unfamiliar item (Halberda, 2003).
 - Previous research suggests bilinguals are less likely to use disambiguation (Byers-Heinlein & Werker, 2009).
 - Kan & Kohnert (2008) found that bilingual 3- to 5-year-olds use disambiguation in their heritage language. One possibility is that the amount of exposure to a language is a determinant of disambiguation.
- RQ: Will young bilinguals show use of disambiguation in their heritage language?**
- H: Bilingual children will use disambiguation word learning strategies in their heritage language (i.e., Spanish).**

Example Trials



Familiar Condition

Disambiguation Condition

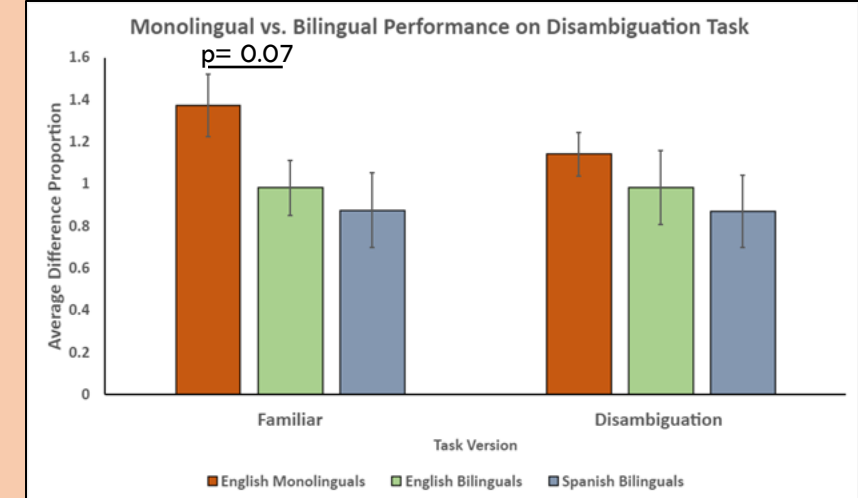
Methods

- Participants:** Forty 18- to 36-month-olds took part in the study: 24 English monolinguals (9F, 15M; M=28 months, SD=0.46) & 16 Spanish-English bilinguals (8F, 8M; M=27 months, SD=0.49), 5 of which were trilingual
- Zoom Session:** Parents & children joined researchers online via Zoom for a 20-minute session.
- Looking Behavior:** The video recording was manually coded by research assistants based on the amount of time each participant was looking at the target object during each trial (10-second trials).
- **Familiar proportion:** 2nd half of trial – 1st half of trial
 - **Disambiguation proportion:** 2nd half of trial – 1st half of trial

Task

- Monolinguals were presented with two task versions, each with a new unfamiliar word-object pairing. Bilinguals were presented with one task version in English and another task in Spanish, each with a new unfamiliar word-object pairing in each language.
 - To keep the children engaged & attentive, we designed two age-appropriate tasks: one for 18-27-month-old children (8 familiar trials, 8 disambiguation trials), and one for 28-36-month-old children (8 familiar, 12 disambiguation trials).
 - For the familiar blocks, 2 familiar objects were shown. In the disambiguation blocks, a familiar & unfamiliar object were shown.
 - During each trial, the child heard a sentence followed by a label (e.g., in English "Find the X"; in Spanish "Mira el X")
- **Familiar objects:** ball, car, shoe (English); pelota, carro, zapato (Spanish)
 - **Disambiguation objects:** nil & dax (English); mito & tuve (Spanish)

Results



Discussion

- We concluded that bilingual children used disambiguation in **both** English and Spanish.
- There was a near-significant difference between the monolinguals and bilinguals' performance in the familiar trials where monolinguals looked at the familiar item for a longer duration.
- Bilinguals in the study were receiving balanced exposure to both of their languages (on average, 47% Spanish, 43% English).
- Spanish exposure showed a positive trend with disambiguation, suggesting that children use disambiguation with greater exposure to their heritage language; $r(14) = .48, p = .059$
- Limitations to this study include a small sample size & the different task shown to children depending on their age.
- This study provides evidence and implications for bilinguals' dual-language learning.

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