

Outcomes among Spanish- and English-Speaking Children with Hearing Loss



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INTRODUCTION

- The vast majority of research within pediatric audiology focuses on White, non-Hispanic children who are monolingual English speakers. Although 1 in 4 children in the U.S. is Hispanic, limited research focuses on Spanish-speaking children with hearing loss (HL; Muñoz et al., 2024).
- In a multi-site study, Wiseman et al. (2025) found that Spanish-English bilingual children with HL had lower hearing aid use than monolingual English speakers, especially among older school-age children. It is possible that language barriers between families and clinicians impact counseling related to device use and other aspects of aural (re)habilitation, given that <3% of audiologists in the U.S. are fluent in Spanish (ASHA, 2024).
- It is unknown if Spanish-speaking children with HL differ from monolingual English-speaking peers in terms of other communication outcomes.
- The goal of this preliminary study was to compare children with HL who are bilingual Spanish-English speakers and monolingual English speakers on a range of listening and language outcomes, including device use, speech recognition in noise, vocabulary, everyday hearing ability, and listening-related fatigue.

PARTICIPANTS

	Monolingual English-Speakers	Spanish-Speakers
n	15 (8F, 7M)	17 (8F, 9M)
Age (years)	8.9 (4.1)	7.2 (5.3)
Maternal Education (years)	17.0 (2.7)	11.2 (2.9)
Age at First Device Fitting (years)	6.6 (4.7)	5.9 (5.2)
% Bilateral HL	66.7%	58.8%
Type of Hearing Device	93% HA, 7% CI	76% HA, 12% BCD, 12% CROS
BEPTA, Bilateral HL Only (dB HL)	29.7 (19.4)	63.1 (31.1)
Better-Ear Aided SII, Bilateral HL Only	90.2 (9.9)	63.4 (33.1)

M (SD). **Bold: $p < .05$** . HL = hearing loss, BEPTA = better-ear pure-tone average, HA = hearing aid, CI = cochlear implant, BCD = bone-conduction device, CROS = contralateral routing of signal

CONTACT

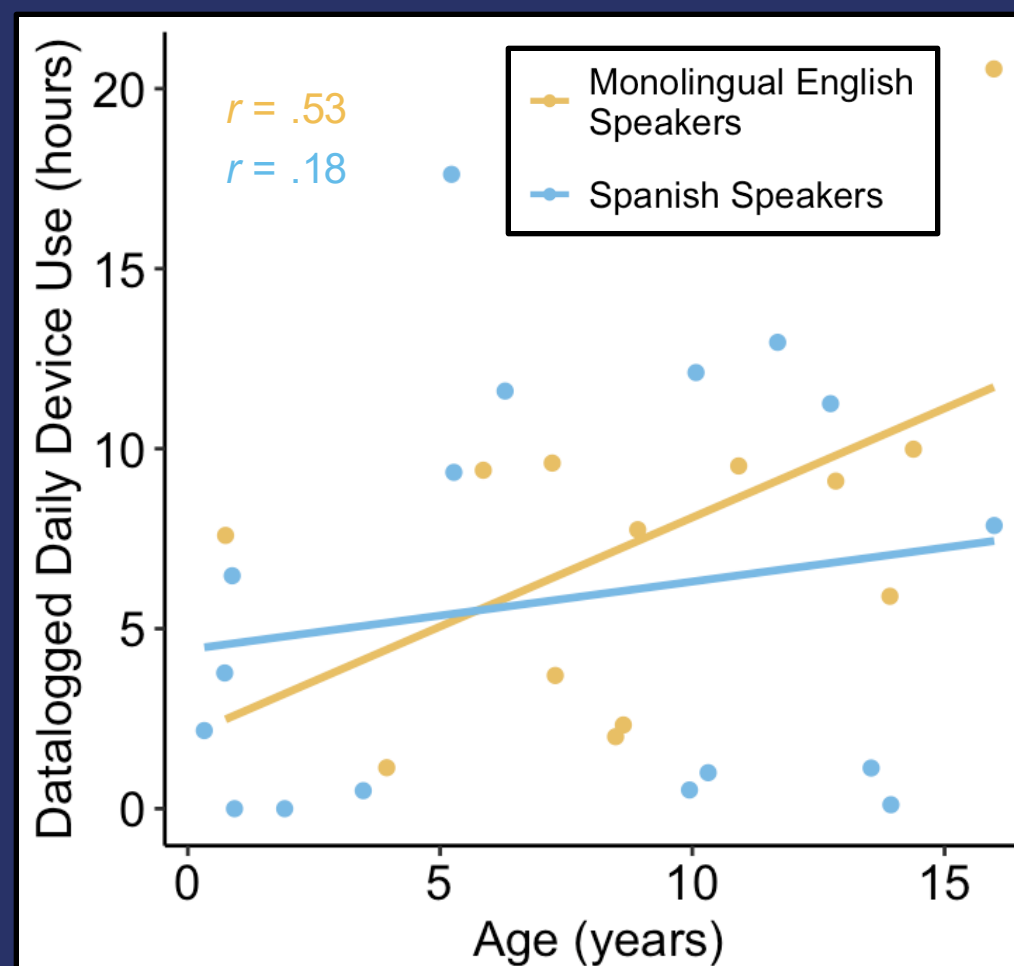
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METHOD

- Patients ages 0 to 20 years recruited from the House Children's Hearing Center, which employs a Spanish-speaking audiologist and front office staff
- Participants completed battery of age-specific assessments following routine clinical visit, and audiologic information from clinical records was later extracted
- Participants were classified as "Spanish-speaking" if they were reported to use Spanish as a first or second language. The remaining were monolingual English speakers (except one child who used ASL as a second language)
- Characteristics of Spanish-speaking children:
 - Dialects of Spanish used: Mexico, El Salvador, Honduras, Columbia, Ecuador
 - Average age exposed to Spanish: 0.9 years
 - Average age exposed to English: 1.8 years

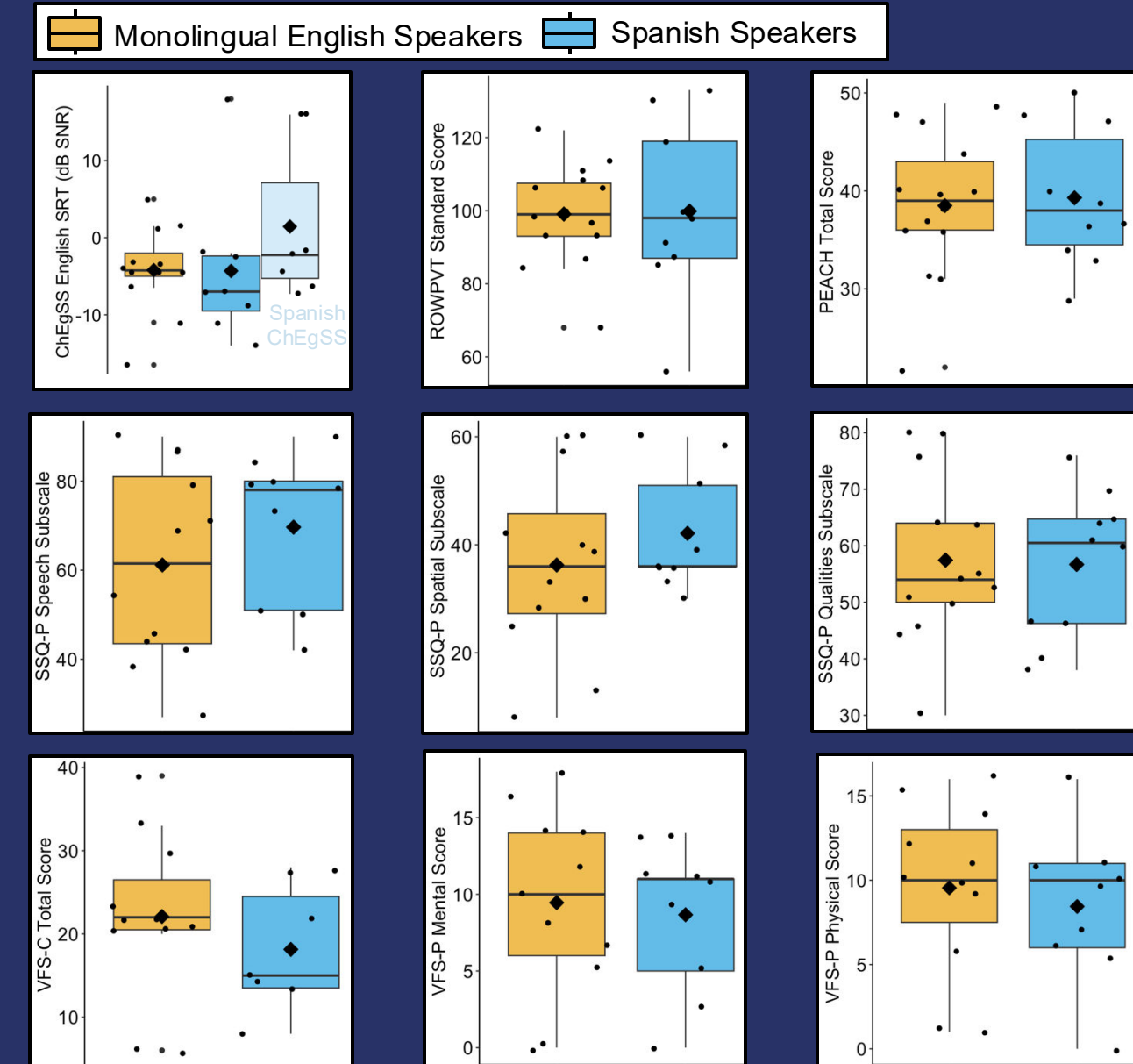
Test Battery Task	Area Assessed
Datalogging	Amount of device use
Children's English/Spanish Speech Recognition Test (ChEgSS)	Word recognition in noise: English and/or Spanish
Pediatric AZBio	Sentence recognition in quiet & noise
Receptive One Word Picture Vocabulary Test (ROWPVT)	Receptive vocabulary: English or bilingual version
Vanderbilt Fatigue Scale (VFS-C, VFS-P)	Listening-related fatigue: child- & parent-report
Speech, Spatial, and Qualities of Hearing Scale (SSQ-C, SSQ-P)	Everyday hearing ability: parent-report
Parent Evaluation of Aural/Oral Performance of Children (PEACH)	Everyday hearing ability: parent-report
Hearing Environments and Reflection on Quality of Life (HEAR-QL)	Hearing-related quality of life: child-report
General Anxiety Disorder-7 (GAD-7)	Anxiety: child-report

RESULTS



Device use tends to increase with age for monolingual English speakers ($p = .06$), but not Spanish speakers ($p = .50$).

RESULTS, CONT.



No significant differences between monolingual English speakers and Spanish speakers in terms of English word recognition in noise, receptive vocabulary, parent-reported everyday hearing ability, or child- or parent-reported listening-related fatigue (p 's > .3).

CONCLUSIONS

- Consistent with Wiseman et al. (2025), amount of device use appears to increase with age among monolingual English-speaking children with HL, but not Spanish speakers.
- Preliminary results indicate similar outcomes between Spanish-speaking and monolingual English-speaking children with HL in terms of speech recognition, vocabulary, and parent- and self-reported communication outcomes.
- Data collection is ongoing; future analyses will examine predictors of individual differences in outcomes, including the effects of socioeconomic status, degree of HL, and aided audibility.
- Future analyses will examine the relative contributions of culture, ethnicity, child language status, and parent language status to outcomes.

REFERENCES

- ASHA. (2024). *Profile of ASHA multilingual service providers, year-end 2023*.
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