# Nationwide Survey: Disparities in Speech-language Pathology Service Knowledge between Hispanic Communities and the General Public through Explanatory Mixed Methods

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### Abstract

Despite ongoing efforts to bridge healthcare disparities, ethnic and language minorities continue to face significant challenges in accessing services (Mahmoud et al., 2014). Yet, in the realm of speech-language pathology (SLP) services, scant empirical research has identified the barriers impeding minority clients' access (Mahendra et al., 2009). With the Hispanic population growing (United States Census Bureau, 2023), identifying their knowledge of and potential access to speech-language pathology services is crucial. This study employed mixed explanatory methods, conducted a nationwide survey with 227 participants across 27 states, and interviewed 12 participants from both Hispanic and non-Hispanic communities, elucidating the challenges faced by the communities.

### Introduction

Speech-language pathologists addresses communication and swallowing disorders, serving diverse populations (ASHA, n.d.). Despite efforts, ethnic and language minorities face disparities in accessing services, often due to a lack of awareness (Mahmoud et al., 2014). Scant empirical research has examined specific barriers impeding minority clients' access to health care services. (Mahendra et al., 2009) With the growing Hispanic population, improving awareness of speech-language pathology services is crucial. This study aims to identify factors influencing their understanding by addressing three core research questions.

#### **Research Questions**

- •What is the depth of people's knowledge about speech-language pathology services among the Hispanic and general populations?
- •What specific barriers contribute to the lack of knowledge about speech-language pathology services?
- •What advice can individuals from the Hispanic community and the general population offer to enhance their knowledge of speech-language pathology services?

# Methods

#### Research design

- Mixed-methods Sequential Explanatory Design
- Quantitative phase: A web-based survey through Qualtrics
- Qualitative phase: In-depth, semi-structured ethnographic interviews

#### **Participants**

- Quantitative phase: The survey was accessed 290 times, and 227 participants completed it. 107 self-identified as Hispanic, and 120 as non-Hispanic.
- Qualitative phase: 12 participants completed interviews, seven in Spanish and five in English.

#### Translation

- Research questions initially developed in English, then translated into Spanish by the bilingual first author
- Back-translation performed by a certified bilingual speech-language pathologist, achieving over 95% semantic equivalence

#### Validity and Reliability

- Instrumentation grounded in extensive literature review
- Construct and content validity affirmed and refined through consultation with two external experts, each with over 15 years of experience with diverse populations
- Bilingual survey administration (English and Spanish) to enhance response validity
- Face validity was established via a pilot study including five Spanish-speaking respondents for the Spanish version and four for the English version

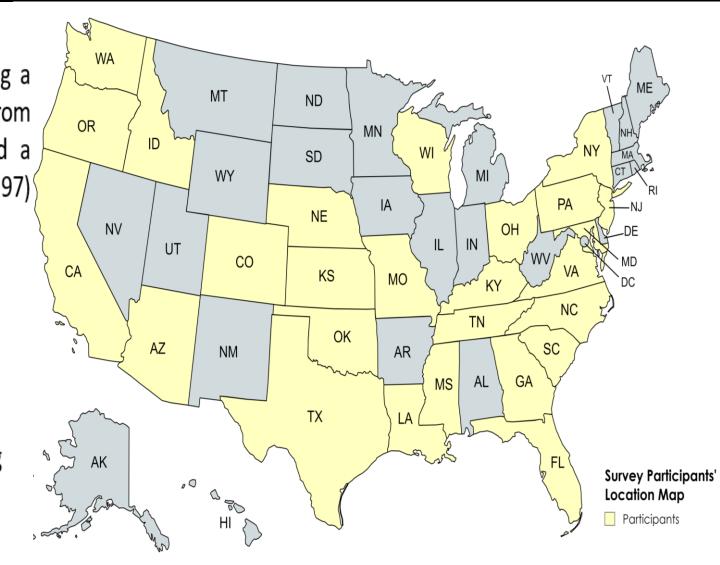
### Analysis

- Quantitative data: Raw data from survey in English and Spanish on Qualtrics were imported onto Microsoft Excel worksheet. All the data was analyzed with the International Business machine Statistical Package for the Social Sciences (IBM-SPSS) Version 27 Software.
- Qualitative data: Responses to open-ended questions and each participant's interview data was transcribed verbatim and typed in a Microsoft Word file (Microsoft Office 365). The transcripts in Spanish were translated into English. A cyclical thematic analysis through an organized and collaborative methodology to identify themes and codes.

### Results

### Quantitative results

- Among 223 respondents surveyed on their knowledge of SLP services using a five-point scale, 106 were from the non-Hispanic communities and 117 from Hispanic communities. Analysis using the Mann-Whitney U test showed a significant knowledge disparity between the non-Hispanic (M = 3.88, SD = 0.97) and the Hispanic (M = 3.40, SD = 1.43; U = 5174.5, Z = -2.2, p = 0.028).
- Further analysis using the Mann-Whitney U test found no demographic differences in knowledge levels across education, age, population size, and household income among 221 respondents.
- However, language significantly affected knowledge levels, with English respondents showing higher understanding (M = 4.11, SD = 1.01) than Spanish respondents (M = 2.05, SD = 1.12; U = 351, Z = -7.12, p < 0.001), underscoring the influence of linguistic variables on knowledge of SLP services.



### Qualitative results

Barriers: Hispanic	Barriers: Non- Hispanic	Advice: Hispanic	Advice: Non- Hispanic
Lack information about the available services in school.	Costs of services	Early identification by teachers regarding communication issues	Increasing awareness in schools
Lack explanation by doctors about specialized services.	Lack of advertising and awareness	Advocate for SLP services in healthcare and educational settings	Advertising in communities
Financial constraints, including insurance coverage	Lack knowledge to accessible services	Improve cultural competence and language accessibility.	Advocate for services
Cultural perceptions create barriers		Provide information in schools and businesses	
Lack knowledge about where to find services		Ensure accessibility in multiple languages	
Difficulty in locating services, particularly in Spanish.		Conducting thorough assessments in Spanish.	
Language barriers, fear, and lack of information		Clarify confusion with other disorders.	
Additional barriers due to documentation fears.		Increase outreach efforts to all demographics	

### Conclusion

#### **Depth of knowledge on SLP services**

- A significant gap in knowledge about SLP services between the Hispanic communities and general populations.
- Linguistic and cultural minorities often have less exposure to and understanding of health-related services (Smedley et al., 2003).

#### **Barriers to knowledge**

- Cultural perceptions, language barriers, and undocumented immigrant concerns offer insight into the multifaceted nature of the obstacles faced by the Hispanic community.
- These findings are consistent with those of Barr and Wanat (2004), who
  highlighted that language inaccessibility and cultural misunderstandings
  significantly hinder health service access.

### Advice on enhancing knowledge of SLP services

- Incorporate SLP topics into school curricula
- Develop multilingual resources and initiate culturally sensitive community outreach.
- Professional development for SLP practitioners (Mahendra et al., 2009)
- Make SLP services more accessible and understood across diverse communities.

#### Clinical implications

- Engaging in community education efforts
- Improving awareness
- Offering services in the client's language
- Providing thorough explanations about the SLP process from referring physicians

### Selected References

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# Acknowledgments

- We would like to thank all the respondents and interviewees who participated in our study.
- We would also like to thank the Fort Hays State University Graduate Scholarship Experience Grant Program for providing financial support for the current study.



Department of Communication Science and Disorders, Fort Hays State University This study is funded by Fort Hays State University Graduate Scholarship Experience Grant Program.