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Deficits in Health Literacy and Inadequacies of Specialized Health Care in the South for Deaf and Hard of Hearing Patients

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The Deficits in Health Literacy and Inadequacy of Specialized Health Care for Deaf and Hard of Hearing Patients in the South

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Introduction

Health literacy (HL) has two definitions:

- **Organizational HL (OHL):** "The degree to which organizations equitably enable individuals to find, understand, and use information and services...."¹
- **Personal HL (PHL):** "The degree to which individuals have the ability to find, understand, and use information and services...."²

Lowercase and uppercase terms have different meanings:

- **"deaf"** and **"hard of hearing"** - used to describe audiological status
- **"Deaf"** and **"Hard of Hearing"** - denote cultural significance, person primarily communicates through American Sign Language (ASL).³
- Most individuals who speak ASL also speak English, effectively making that person bilingual.

Pollard and Barnett (2019) found:

- **~90%** of 57 DHH participants who took the Rapid Estimate of Adult Health Literacy in Medicine (REALM) only understood at least **68.4%** of terms.⁴
- **One out of three** participants reported understanding **less than a 9th grade reading level**.⁴
- **31.6%** have low PHL, and out of that percentage, **21.7%** held college degrees.⁴

Consider Dialectical Behavior Therapy (DBT):

- Designed to decrease suicidal ideation, self-injury, ER visits, etc.
- adapted for many different uses: inpatients, the elderly, and people who speak different languages.⁵
- There is **not** a form of DBT specifically designed for DHH people who speak ASL.⁵

Obstacles for DHH people:

- Ignorance of Deafness
- Poor attitude toward DHH people
- Limited DHH patient literature and conversation literacy
- Limited time during consultations⁶

Research Questions (RQ):

1. Do people who are DHH have lower health literacy levels than their hearing counterparts in the South?
2. If so, how can this information be used to increase cultural understanding, moments of care, and overall quality of life?

Methods

Online Survey with two components (mixed methods):

- Short Assessment of Health Literacy – English (SAHL-E) (Quantitative)⁷
- Open-Ended Questions about Trauma in Healthcare (OEQ) (Qualitative)

The SAHL-E (RQ 1):

- 18 question survey that attempts to approximate the participant's PHL.
- If a participant scores ≤ 14 , low PHL is indicated.
- If a participant scores ≥ 15 , sufficient PHL is indicated.

The OEQ (RQ 2):

- Asked the participant to describe their past experiences with healthcare, specifically about trust, trauma, and betrayal
- Allows participants to voluntarily offer information that can suggest factors other than HL that can affect quality of care
- Participants were also asked what they need and what they want from their healthcare experiences.

Inclusion and exclusion criteria:

- The participant must identify as "d/Deaf," "hard of hearing/Hard of Hearing," "DeafBlind/low vision," "Late-deafened," or "Other."
- The participant must not identify as "hearing."

Other demographics, such as race, gender, social status, economic status, age, and location, were collected to perform statistical analysis and comparison.

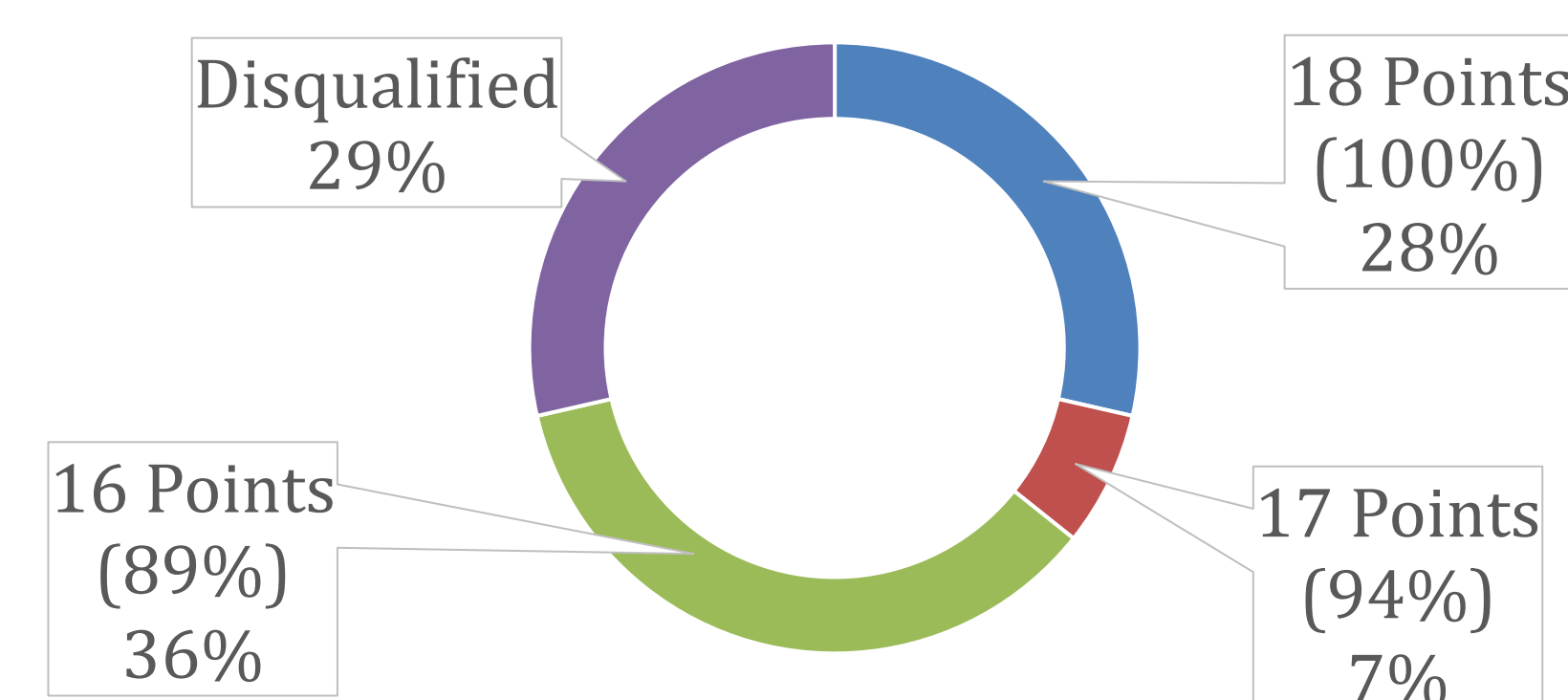
This information was then used to identify possible sources of negative healthcare outcomes and determine whether low PHL of those who are DHH influence those outcomes.

Results

SAHL-E Response Data:

- 14 responses were recorded
- 4 responses disqualified due to not meeting the inclusion criteria or providing incomplete responses

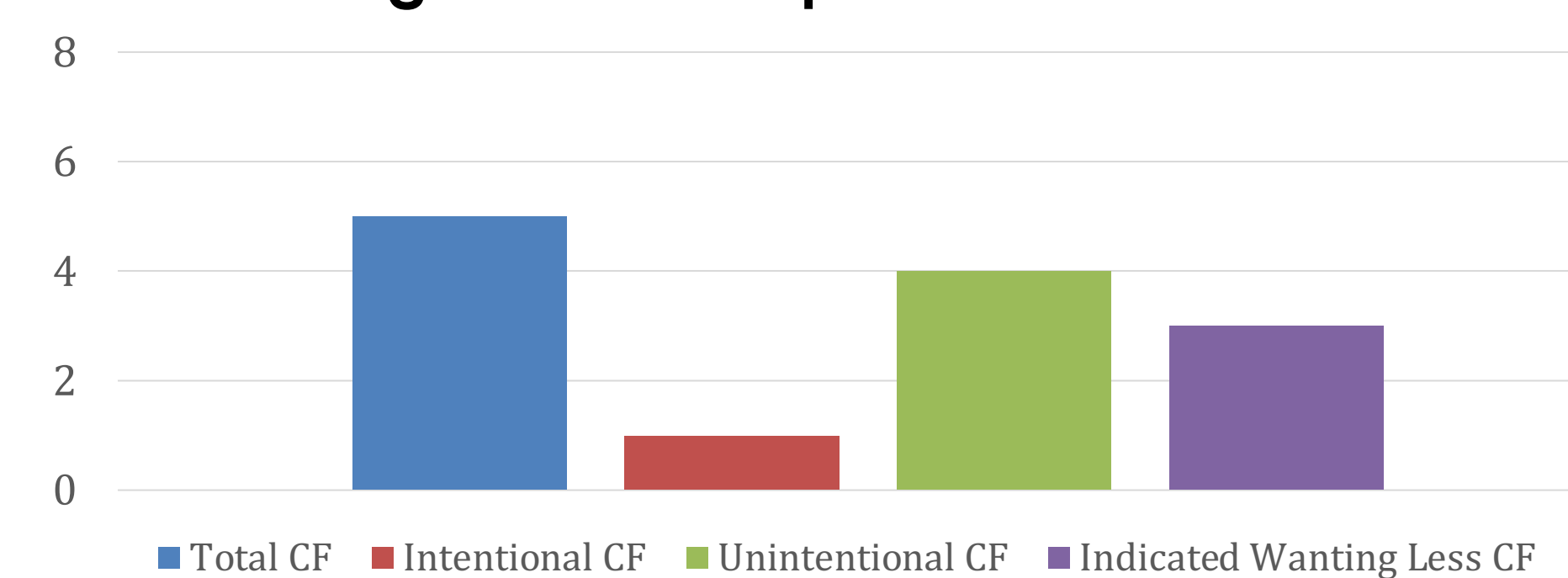
Figure 1: SAHL-E Results



OEQ Response Data:

- 8 out of 9 participants responded thoughtfully
- 5 noted communication failures (CF) during their encounters, as evident in **Figure 2**.

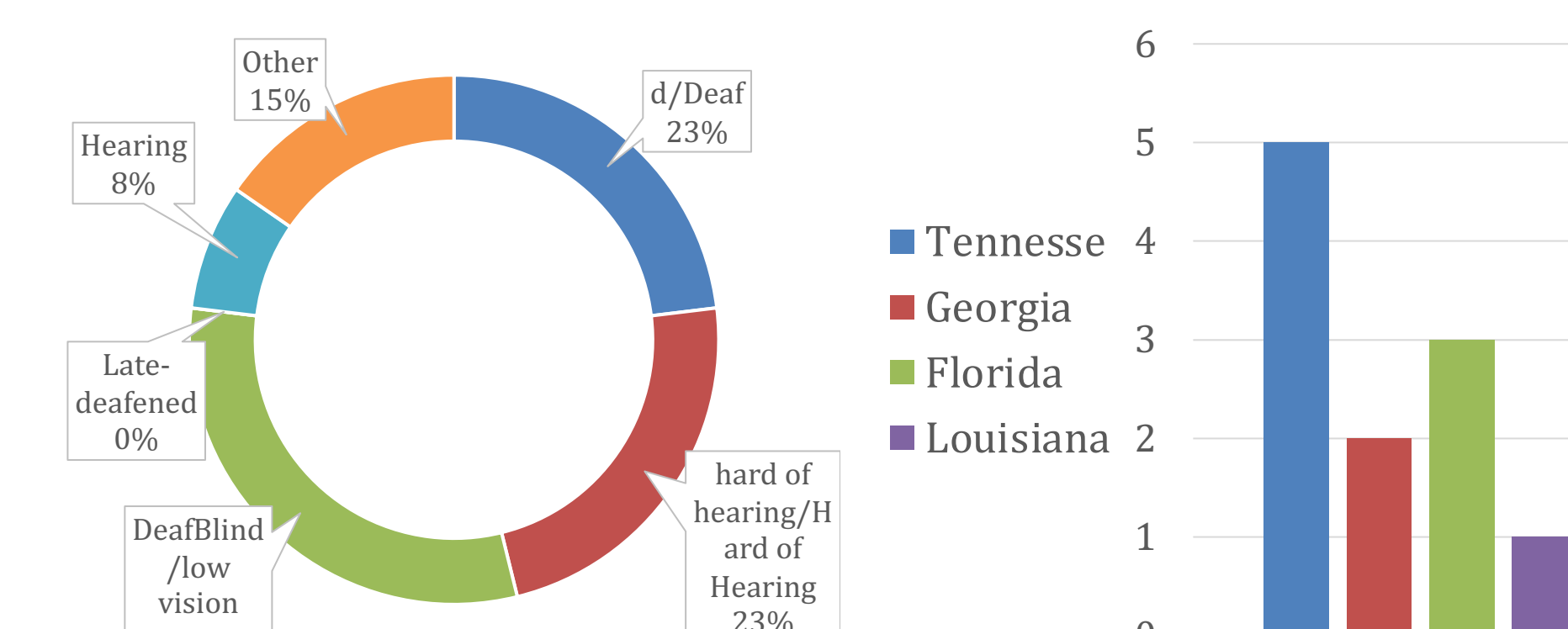
Figure 2: Participant Identified CF



Demographic Information (Figure 3):

- **100%** White or Caucasian
- **100%** have higher levels of education (at least some college)
- Average age: 64 (min. 40, max. 77).

Figure 3: Participant DHH Status and State Composition



Conclusions

Data Interpretation:

- Group of participants is **not diverse** and belonged to a non-minority demographic with historical systemic advantage
- Each participant that completed the SAHL-E did so with **satisfactory results**
- However, each participant noted emotionally significant experiences that suggest **factors other than PHL** influencing quality care.

Communication Failures:

- **63%** participants noted CF
- **4** unintentional, **1** intentional

Conclusion:

- Data suggests that no matter the level of socioeconomic advantage, those who are DHH have an unacceptable chance of experiencing CF and lower quality of care
- These CF, as told by our participants, can lead to extreme consequences

Future Direction:

- This study indicates the need for more specialized health care accommodations for DHH people
- Regardless of education, race, or age, DHH individuals need these accommodations higher quality outcomes.

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