# Training Interpreters in Aphasia Evaluations: a pilot study

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## Background

- Medical interpreting goals can differ substantially from speech-language pathologists' (SLPs) goals, particularly in aphasia assessments
- Medical interpreters aim to ensure understanding of meaning and equivalence between two languages
- Interpreters adopt an "invisible" role during interpreted interactions, which is problematic as SLPs rely on interpreters for active explanation and overt dialogue to inform a diagnosis effectively.1
- Lack of communication between disciplines and assumptions of skills of other professionals can lead to errors.2
- Numerous errors are introduced by interpreters in the form of information that is not conveyed or added without the SLP's knowledge.
- Lack of reporting errors blinds SLPs to patients' responses, impacting accurate diagnoses.3,4,5
- **Aims:** This pilot study aimed to 1) train interpreters on the purpose of aphasia assessments and 2) examine whether interpreter errors in aphasia assessments decreased after training.

## Methods

**Participants**

- 8 Spanish-English interpreters; 2-10 years of experience
- 2 PWA; fluent and anomic chronic aphasia
- 1 SLP provided evaluations
- Each interpreter participated in 2 evaluations. 1 interpreter missed the 2nd evaluation. There were a total of 15 pre- and post-evaluations. Aphasia assessments included subtests of the BDAE + BNT-short form) with 1 randomly assigned PWA pre- and post- training.
- **4 of 8 interpreters** randomly assigned to a training module

**Intervention**

- **2-hour training module**:
  - SLP evaluation process, language skills evaluated (e.g., semantic error vs phonemic error)
  - Interpreter role for aphasia assessment

**Checklist Development**

- A Bilingual SLP (EL) and Spanish Linguist/Interpreter (SE) developed a list of observed error codes a priori
- The team discussed the error codes and refined the definitions
- EL & ES coded a second video using updated definitions
- The team discussed and refined the error codes again

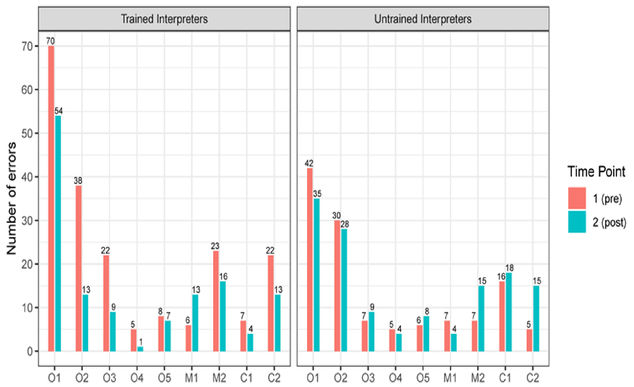
**Analysis: Bayesian mixed-effects models**

The number of errors was analyzed using Bayesian mixed-effects models to identify changes in error frequency between the pre- and post-training sessions. The model included population-effects for time point (pre vs. post-training), condition (training vs. no-training groups) and their interaction.

## Results

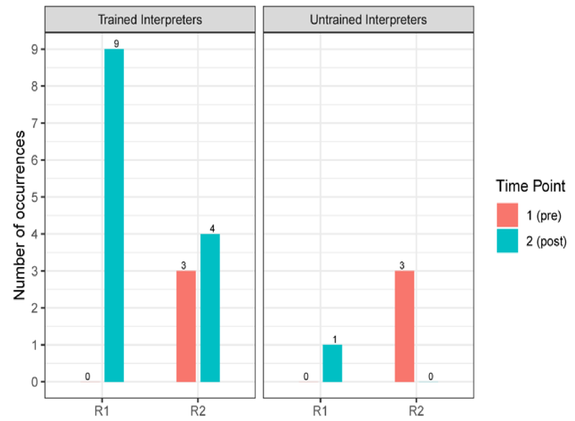
- The untrained group showed little change in number of errors between the first and second assessment sessions.
- The trained group showed reduced errors from baseline to post-training: 1) decreased omissions of content and 2) decreased instances of failure to point out potential patient errors (Figure 1).
- Trained interpreters improved in recognizing and calling attention to potential language/speech errors or potential confusion based on linguistic and cultural differences (Figure 2).
- Although the credible interval for the interaction included zero (β = -0.45, 90% CI: -1.02, 0.17), 90% of its posterior distribution was less than zero, suggesting that errors for the training group decreased more than errors for the no-training group from pre- to post-training.

**Figure 1.** Comparison of errors by untrained and trained interpreters: Omission, meaning, and cueing




*Notes*: The y-axis represents the raw count number of errors produced by the interpreters. The x-axis represents the types of errors as follows: O1 = Omission of Patient language/speech content; O2 = Omission of Potential Patient language/speech errors; O3 = Omission of SLP language/speech; O4 = Omission of Interpreter questions/comments; O5 = Omission of linguistic or cultural context; M1 = Changes to meaning of Patient language/speech; M2 = Changes to meaning of SLP language/speech; C1 = Provides verbal cue; C2 = Provides non-verbal cue.

**Figure 2.** Comparison of positive (encouraged) behaviors between untrained and trained interpreters




*Notes*: The y-axis represents the raw count number of recognition behaviors produced by the interpreters. The x-axis represents the types of recognition behaviors as follows: R1 = the interpreter points out potential language/speech errors; R2 = the interpreter points out potential instances of confusion

## Conclusions

- This pilot study results **supports the need for interpreter training** to improve interpreter-SLP collaborations in the context of aphasia assessments.
- The **number of errors** in an interpreted-mediated assessment **are prevalent**.
- **Trained interpreters showed fewer errors** in the post-training session
- There is a range across several types of errors, however, the **high number of omissions** is noteworthy.
- Omissions of patient productions can contribute significantly to errors in differential diagnosis.
- The categories where the contrast was most pronounced between trained and untrained interpreters were those which may directly impact an SLP's diagnosis of aphasia.

## Future Directions

- Training for interpreters is needed as their role in aphasia evaluation sessions may be different from their previous education.
- Consider training SLPs to better understand interpreter training/perspectives to facilitate improved collaboration with interpreters.

## References

1.Angelelli, C. (2004). Revisiting the interpreter's role: A study of conference, court, and medical interpreters in Canada, Mexico, and the United States. Amsterdam: John Benjamins.

2.Isaac, K. M. (2008). in the Clinic: Interpreters in Speech-Language Pathology. Clinical sociolinguistics, 15, 265.

3.American Speech-Language-Hearing Association Practice Portal, Professional Issues: Collaborating With Interpreters. Retrieved from: http://www.asha.org/Practice-Portal/Professional-Issues/ Collaborating-With-Interpreters/

4.Roger, P., & Code, C. (2011). Lost in translation? Issues of content validity in interpreter-mediated aphasia assessments. International Journal of Speech-Language Pathology, 13(1), 61-73.

5.Kambanaros, Maria & Willem van Steenbrugge (2004) Interpreters and language assessment: Confrontation naming and interpreting, Advances in Speech Language Pathology, 6:4, 247-252, DOI: 10.1080/14417040400010009

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