# Language Access Profiles: A better way to characterize DHH children's early communicative input

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## Introduction

DHH children's early experiences with linguistic input are more diverse and dynamic than research based on "communication mode" acknowledges. Instead, we propose "language access profiles" as an alternative construct, and present two new tools that aim to measure this construct in ways that are useful for both theory and practice.

## Current Study

- Interviews w/ parents of 106 DHH children, 0;8-12;11
- Any level of permanent hearing loss prior to age 3
- No exclusions for additional diagnoses
- Fixed order of administration of two caregiver-report measures of language access histories:
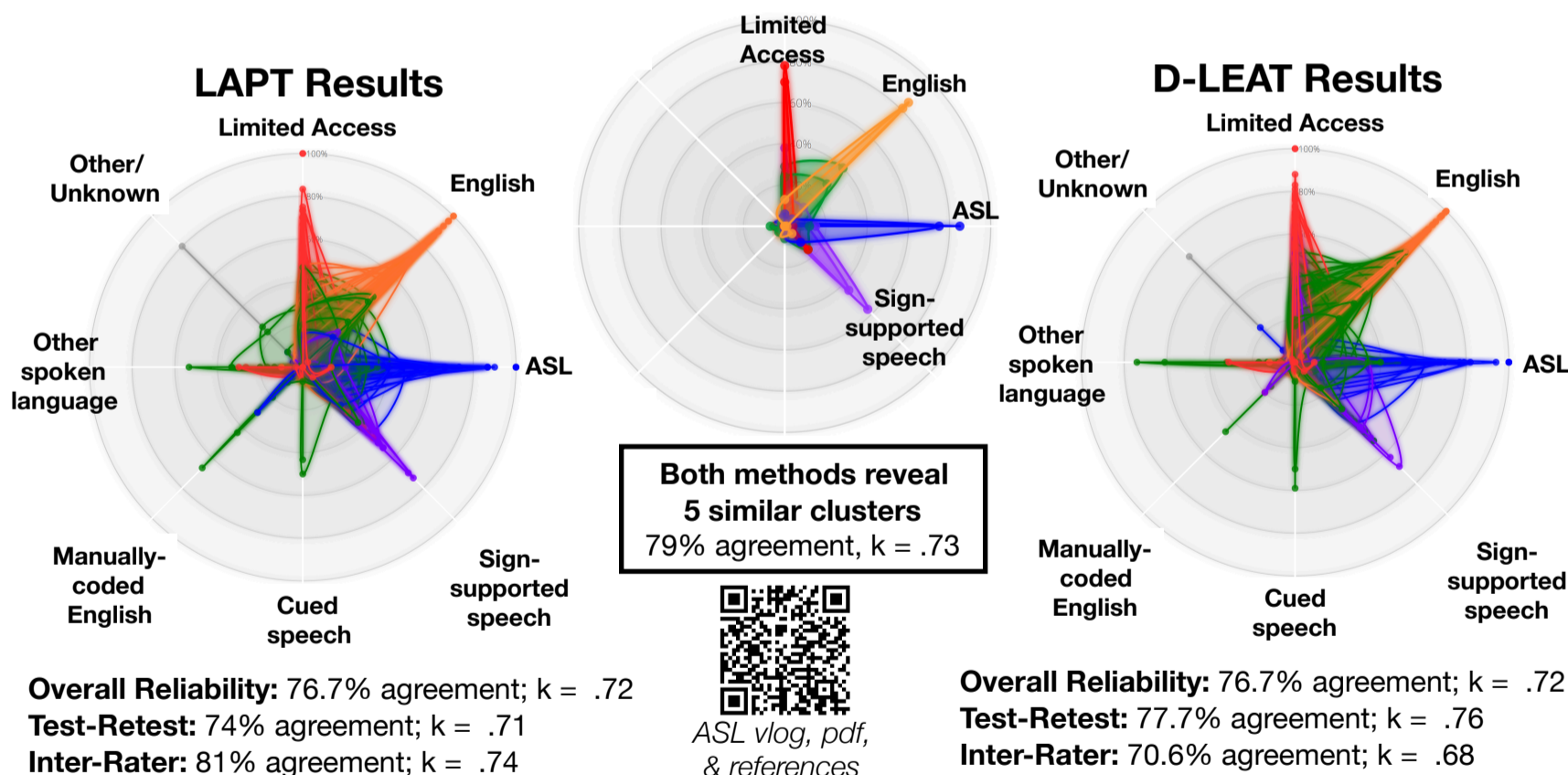  - LAPT (less detailed)
  - D-LEAT (more detailed)

## Language Access Profile Tool

- "Exposure" (signals sent) vs. "Access" (signals received)
- Introduce input categories (video examples available)
  - Limited Access: when signals are sent but not received (e.g. spoken language w/o auditory access)
  - Other/Unknown: homesign, other sign languages, AAC; divorce, adoption, foster care…
- Eliminate irrelevant input categories
- Distribute 100% over remaining categories, 4 estimates
  - age periods: 0-3 (warm-up), 0-1, 1-2, 2-3
- Analyze average of the 3 year-by-year estimates

## DHH Language Exposure Assessment Tool

- List child's main interlocutors and the types of communication they use
- Identify onset of language access
- Identify when & how often child sees each interlocutor
  - Adjust for changes in communication approach & auditory access
- Estimate number of hours of input per interlocutor
- Estimate interlocutors distribution of communication types
- Software calculates overall estimate.

## Average Language Access Profiles by Cluster & Tool



### LAPT Results

**Overall Reliability:** 76.7% agreement; k = .72
**Test-Retest:** 74% agreement; k = .71
**Inter-Rater:** 81% agreement; k = .74

### D-LEAT Results

**Overall Reliability:** 76.7% agreement; k = .72
**Test-Retest:** 77.7% agreement; k = .76
**Inter-Rater:** 70.6% agreement; k = .68

Both methods reveal 5 similar clusters
79% agreement, k = .73

*ASL vlog, pdf, & references*

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**LAPT Strengths:** easy to learn, quick to administer
**Weaknesses:** less detailed, more subjective
**Recommended for:** ages 3y-12y, retrospective report

**D-LEAT Strengths:** more detailed, more objective
**Weaknesses:** harder to learn, more time-consuming
**Recommended for:** repeated administration, 0-3y

## Implications for Theory & Practice

**Theory:** "communication mode" obscures crucial diversity in communicative input, limiting generalizations of previous research. **Language Access Profiles** offer a viable way to capture the complexity and diversity of real individuals' experiences while also yielding well-motivated, data-driven grouping variables for research purposes.

**Practice:** Assessing input is crucial for making assessment decisions, interpreting results, determining the presence of language impairments, and establishing treatment goals. These are the first tools designed to assess DHH children's input.