"Communication mode", as currently understood, **cannot** reveal what types of language input are most likely to yield language proficiency in DHH children. The field needs an alternative construct.

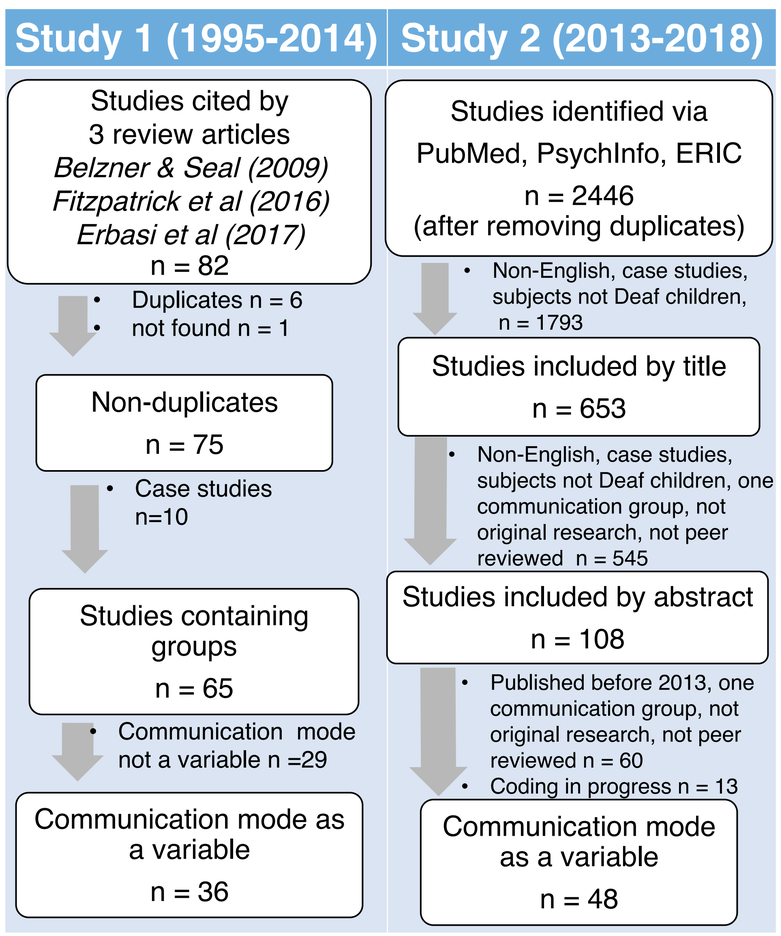
ASL vlog, pdf, & references

Against "Communication Mode"

Matthew L. Hall, Temple University
Sheila Dills, Independent

INTRODUCTION

Existing studies about "communication mode" yield inconsistent and often contradictory results. We hypothesize that one root cause of this confusion is the very construct of "communication mode" itself. We therefore investigated how communication mode was operationalized in the research literature, by conducting two systematic reviews.



Manuscripts coded for:

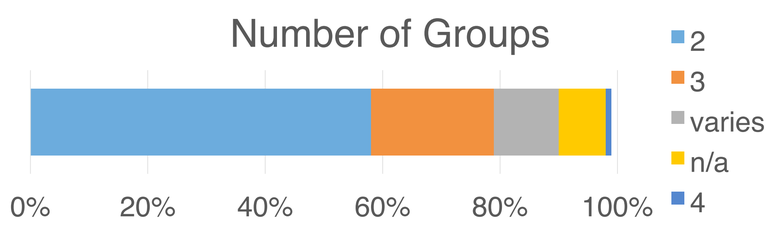
- Number of Groups
- Statistical Model
- Conceptualization of Modes
- Setting Used
- Time Period
- Who Reported
- How Reported
- Distinguish Between Input vs. Use
- Labels of Groups
- Are Groups Described?
- Description of the Groups
- Experience with Other Spoken Languages
- Experience with Other Signed Languages
- Duration Without Access
  - If yes, how

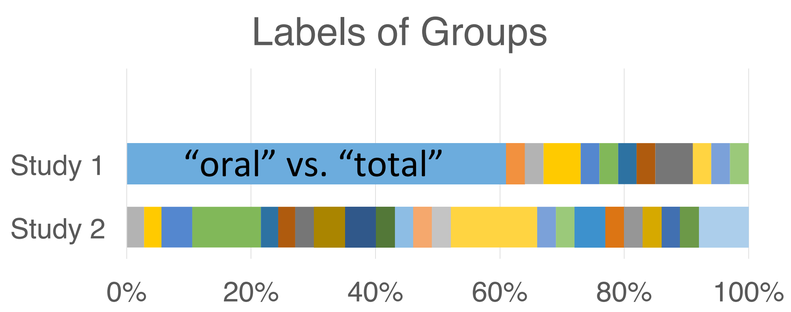
Inter-rater reliability

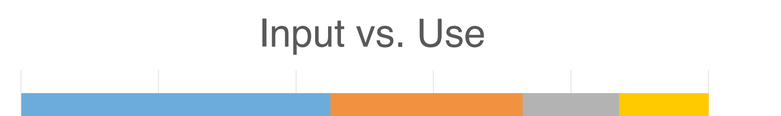
- Initially low: poor coding fidelity? ambiguity in the manuscripts? Both?
- Solution: consensus-based framework
  - two coders reviewed all papers
  - disagreements resolved through discussion

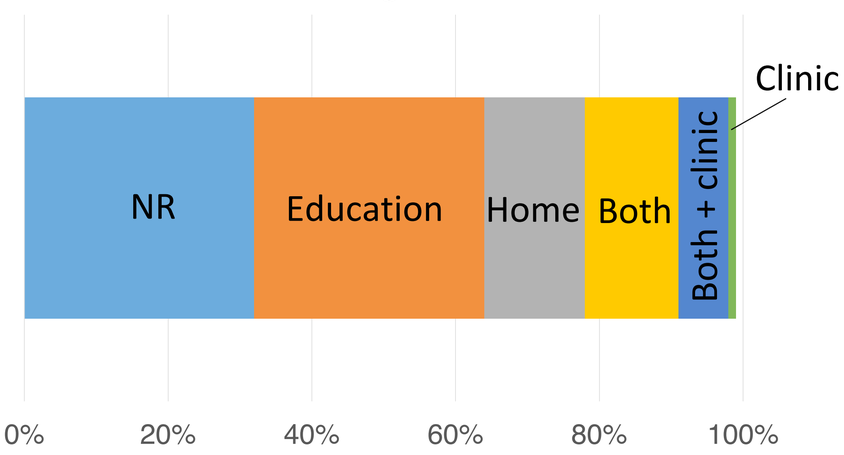
RESULTS: 6 fatal flaws in the construct prevent "communication mode" from revealing what kind of early input optimizes language acquisition, *regardless of any empirical data.*

1. No consistent operational definition:

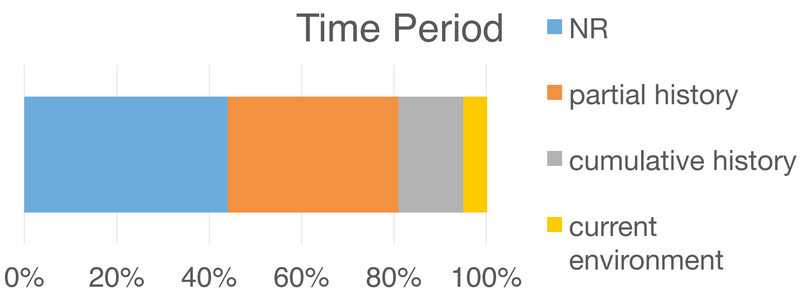




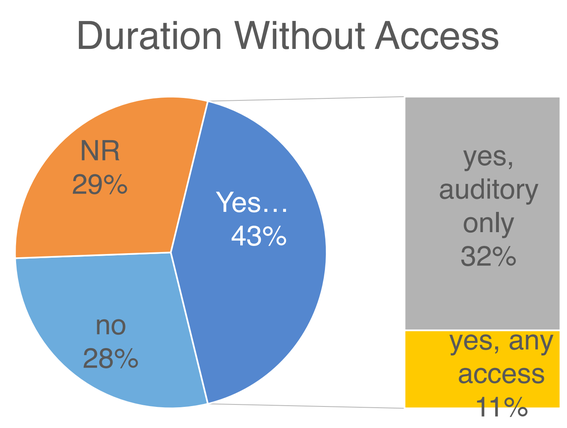




2. Not a cumulative history. Input during infancy & toddlerhood was available for only 8% (Study 1) and 20% (Study 2).



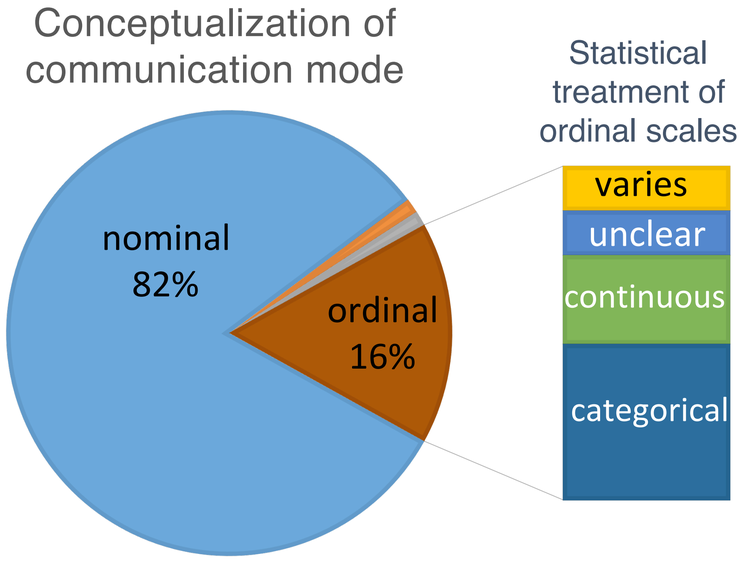
3. Does not capture lack of access to any form of input. Studies were listed as "no" if they examined this information, but did not factor it into communication mode groupings.



4. Lumps some (but not all) types of manual communication together. ASL, Signed English, sign-supported speech are typically not distinguished. Cued Speech usually is.

5. Obscures the extent of access to given input types. Most studies provided no information about how much "signing" was required to be in the "signing" group.

6. Unidimensional categories are used to represent a multidimensional construct. Other studies collected information about extent of access, but collapsed across categories, sometimes inappropriately averaging over ordinal scales.



"Communication mode" is not useful.

- Operational definition is almost entirely unconstrained.
- Poor operationalization may explain empirical results that appear to conflict.
- Limits evidence-based guidance for hearing parents of DHH children, especially during infancy & toddlerhood.

The field needs a viable alternative construct that has the following features:

- Clear & consistent operational definition
- Cumulative history through at least infancy & toddlerhood
- Documents language *access*, not language *exposure* or language *use*
- Appropriately distinguishes natural sign languages from derived codes
- Distinguishes derived codes from one another
- Captures the distribution of a child's access to different types of input
- Grouping variables based on this multidimensional distribution (ideally data-driven).