“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.

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.

METHODS
Two systematic reviews were conducted by searching PubMed, PsychInfo, ERIC, and Google Scholar with the following search terms: “communication mode” and “sign language”. Studies identified via PubMed, PsychInfo, ERIC n = 2466 (after removing duplicates)

- Non-English, case studies, subjects not Deaf children, n = 1793

- Communication mode not a variable n = 29

- Communication mode as a variable n = 36

During the first study, 3 review articles were conducted. A total of 2466 studies were identified. Of these, 1514 were duplicates or not found. 655 were related to “communication mode”. 36 were related to communication mode as a variable. 29 were not related. The second study was a systematic review of the first study, conducted by two independent coders. They reviewed all papers and resolved disagreements 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:

   - Number of Groups
     - NR
     - 3
     - 3
     - varies
     - na
   - Labels of Groups
     - NR
     - Input
     - Use
     - Both

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 unexplained.
- 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).