

Impacts on the early language environments of deaf children with hearing parents



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Background

- Most deaf children are born to hearing parents who know little-to-no sign language when their child is born.
- Access to spoken language depends on factors like device use/efficacy, residual hearing levels, and environment.
- As a result, deaf children are at a high risk for early language deprivation.
 - This carries long-term effects on social, cognitive, and academic development.

Methods

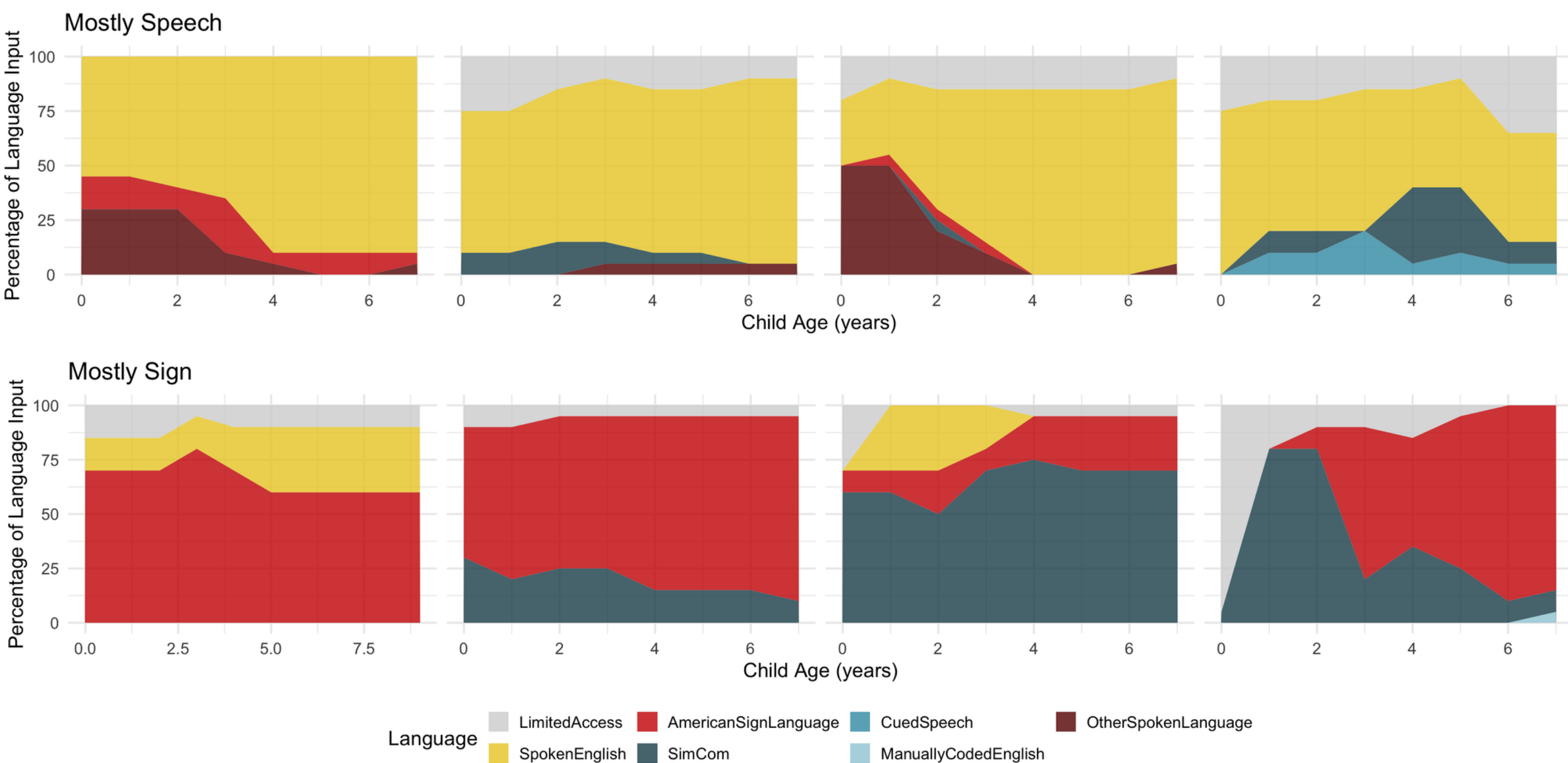
- **Participants:** 53 deaf children (4 – 11 yr; M = 7.2 yr)
 - at least one hearing parent
 - began learning ASL in early childhood
- **Instrument:** Language Access Profile Tool (Hall & De Anda, 2022)
 - Zoom interview with parents about their child’s language history, services, and life events
 - This provided year-by-year estimates of the amount, type, and accessibility of language exposure

Research Questions:

1. How does language exposure change across age?
2. Do certain life events predict changes in language input?

Results

Each panel below represents one child’s percentage of language input in each language.



Even within children who used mostly speech (top) or mostly sign (bottom), language profiles differed dramatically

For nearly all children (86%), the amount of time with no accessible input decreased across age
Early years are most vulnerable to language deprivation

- Increases to English occurred after:
 - Receiving hearing aids
 - Cochlear implant activation
 - COVID-19
 - Birth/adoption of a new sibling
- Increases to ASL occurred after:
 - Caregiver enrollment in ASL classes
 - Deaf mentor programs
 - Changes to the adults in the household

What drives changes to language environments?

Got hearing aid	-26	14	4	10	0	0	-2	-1
Got cochlear implant	-25	18	0	10	-1	0	0	-2
Started ASL classes	-20	8	8	6	0	0	-1	-1
Started or increased time with deaf mentor	-14	3	6	5	0	0	0	0
COVID-related change to school	-6	13	0	-6	0	0	0	0
Changes to adults in household (ex: divorce or grandparent moved in)	-12	2	7	2	0	0	0	0
Started or increased speech therapy	-11	9	3	0	0	0	-1	0
Changes to children in household (ex: new sibling born or adopted)	-4	11	-2	-4	-1	0	-1	0
Other	-7	5	1	1	0	0	0	0
Started school or changed schools	-5	2	6	-3	0	0	0	0
Moved	-6	4	0	3	0	0	0	0
Limited Access								
Spoken English								
American Sign Language								
Sign Supported English								
Manually Coded English								
Cued English								
Other Spoken Language								
Unknown								

Takeaways:

Deaf children’s language input is varied and dynamic.

Language input changes frequently across time, and these changes can be linked to specific events in the child’s life.