

Introduction

Language development is related to language experience. Most research has focused on **input from adult caregivers**.¹

However, children around the world interact with other children.²

- Infants with older siblings exhibit slower language development.³
- Thought to be due to resource limitations on behalf of parents.⁴

Previous research has focused on differences in adult input for younger vs. eldest children.

Here, we measure speech quantity and content from older children in two types of recordings: daylong recordings and in-lab play sessions.

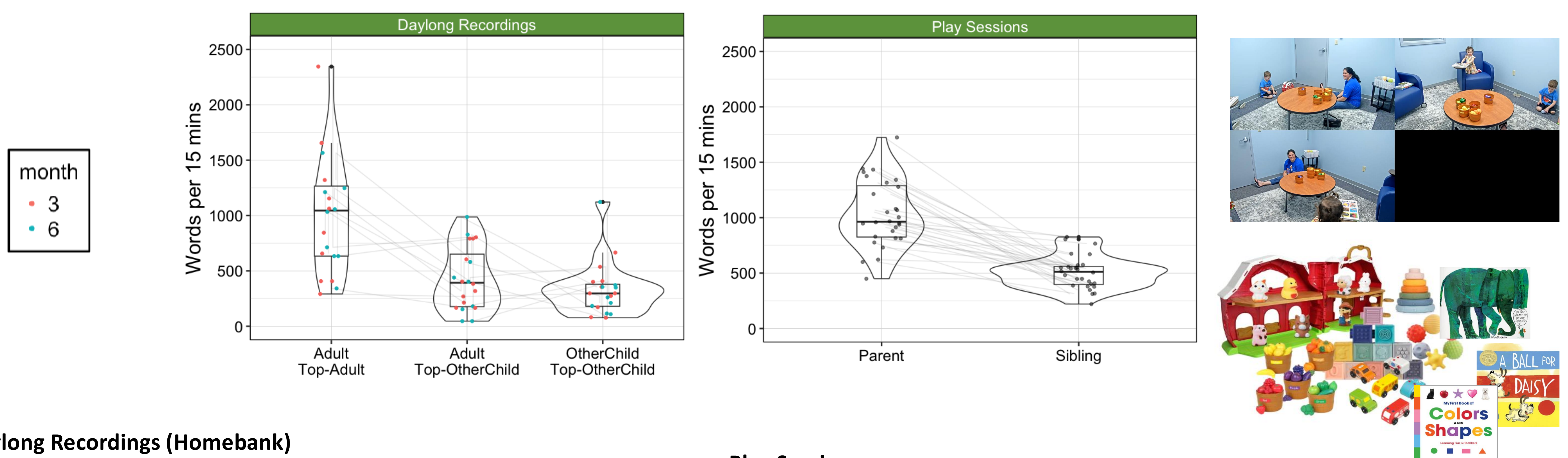
Daylong recordings from HomeBank

- 9 infants with older siblings from San Joaquin Valley Corpus⁵
- 2 LENA recordings each at 3 and 6 months (18 recordings total)
- Identified 3, 15min non-overlapping Top-OtherChild chunks
- Transcribed 30s surrounding each OtherChild segment (CXN)
- Compared to Adult speech for Top-OtherChild and Top-Adult chunks

In-lab play sessions

- 28 infants with older siblings (data collection ongoing)
- Infant: 9-15 months (M = 12m), Sibling: 3-5 years old (Mean = 3.7), Parent: Mother (N = 27), Father = (N = 1)
- 15 minute in-lab play session

Quantity of speech



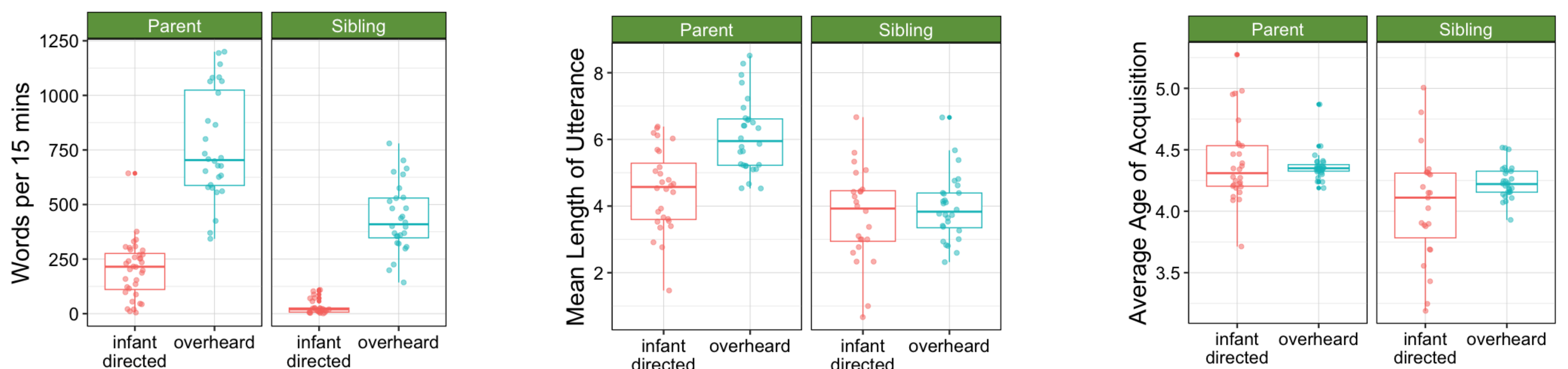
Daylong Recordings (Homebank)

- Similar amounts of Other-Child and Adult speech ($p=.25$) in Top-OtherChild
- Less OtherChild speech in Top-OtherChild chunks than Adult speech in Top-Adult chunks ($p < .001$)
- Other-Child speech makes up ~25% of Top-Adult input and 43% of input in Top-OtherChild

Play Sessions

- Siblings produced significantly fewer words than adults ($p < .001$)
- Still, sibling speech made up ~33% of the input

Properties of speech (Play Sessions Only)



- Parent speech was infant-directed 25% of the time
- Sibling speech was infant-directed 6% of the time

- Parent MLU was longer for overheard speech
- Sibling MLU did not differ by addressee

- Parent word AoA⁶ does not differ
- Sibling word AoA is earlier overall, but later for overheard speech

Discussion

Quantity of speech from Other-Children

- Other-child speech makes up 25-43% of the input, depending on the comparison

Properties of speech from Other-Children

- In triadic play sessions, most speech is overheard by infants
- Properties of “overheard” speech with siblings may be easier to learn from than overheard speech between adults due to its properties
 - Siblings’ MLU does not differ for directed vs. overheard speech, or from adult infant-directed speech
 - Sibling speech may contain earlier learned words, particularly in infant-directed speech

Conclusions and future directions

- Important to consider the role of different sources of speech on language processing and learning
- Future analyses will link these experiences to language development

Acknowledgements

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Citations

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6. Kuperman, V., Stadthagen-Gonzalez, H., & Brysbaert, M. (2012). Age-of-acquisition ratings for 30,000 English words. *Behavior research methods*, 44(4), 978-990.