

BACKGROUND

- Infants prefer to listen to Infant-directed speech (IDS) over Adult-directed speech (ADS) (Cooper & Aslin, 1990). However, the size of this effect has been inconsistent in the literature.
- We participated in Experiment 1 of the Many Babies Project, a multi-lab replication effort that worked collaboratively to replicate the IDS preference across different infant age groups and testing methods (The ManyBabies Consortium, 2019).
- Secondly, we are participating in a follow-up Many Babies study examining the relation between IDS preference and later language development

RESEARCH QUESTIONS

- 1) Do 3- to 6- month-old infants prefer Infant-directed speech (IDS) or Adult-directed speech (ADS)?
- 2) Is the degree of preference for IDS related to infants' later language development, at 18-months old or 24-months old?

METHODS

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| <p>Experiment 1:</p> <ul style="list-style-type: none"> - n = 22 - Procedure: Single screen preference paradigm - Stimuli: 8 IDS and 8 ADS sentences (randomized) - IV: Speech Type (IDS or ADS) - DV: Looking time (s) | <p>Experiment 2:</p> <ul style="list-style-type: none"> - n = 13 - Procedure: MacArthur Bates Communicative Development Inventory (MB-CDI) - Testing Points: 18 months & 24 months - IV: IDS Preference from Exp. 1 - DV: Vocabulary (MB-CDI) |
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Figure 1. Experiment set-up for preference LT procedure.

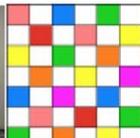


Figure 2. Exp. 1 visual stimulus



Figure 3. Exp. 2 testing procedure using the online MB-CDI.

RESULTS

Experiment 1

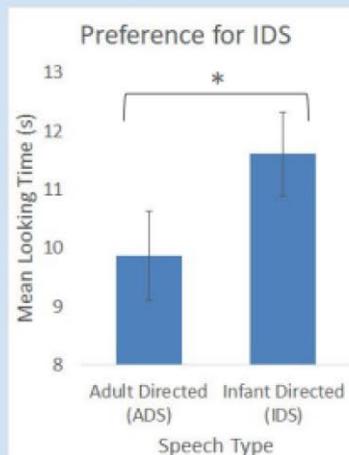


Figure 4. Results from Experiment 1. Mean looking time (in seconds) plotted as a function of speech type. Results demonstrate a significant main effect of speech type, such that infants looked significantly longer at Infant-directed speech compared to Adult-directed speech, $t(22) = 4.356, p < .001$.

Experiment 2

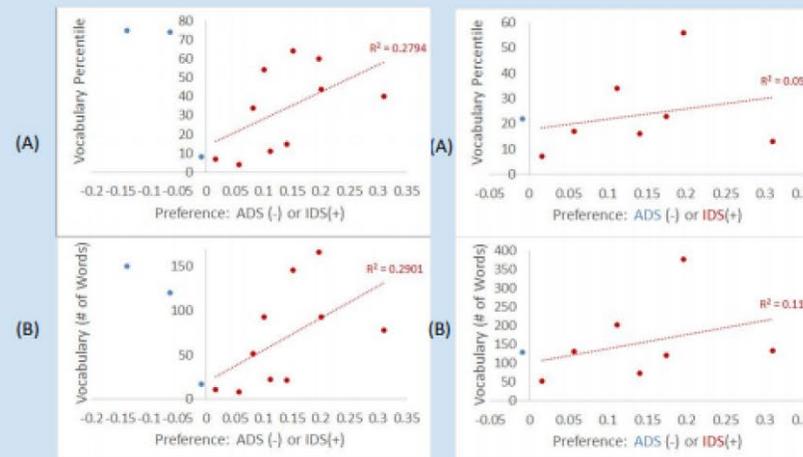


Figure 5. Results at 18 months old (n=13). A) Relation between degree of IDS preference and vocabulary percentile. B) Relation between degree of IDS preference and number of words known.

Figure 6. Results at 24 months old (n=8). A) Relation between degree of IDS preference and vocabulary percentile. B) Relation between degree of IDS preference and number of words known.

CONCLUSIONS

Experiment 1:

- Infants at 3- to 6 months show a significant preference for Infant-directed speech (IDS) over Adult-directed speech.

Experiment 2:

- At 18-months, the degree to which babies preferred IDS was a positive predictor for vocabulary development.
- At 24-months, the relation between earlier IDS preference and vocabulary was still positive, but not as strong.

FUTURE DIRECTIONS

- Complete MB-CDI data collection for infants at age 24 months.
- Investigate the relation between preference for IDS and other language abilities, such as phonology.

References:

- Cooper, R. P. and Aslin, R. N. (1990) Preference for Infant-directed Speech in the First Month after Birth. *Child Development*, 61: 1584-1595.
- The Bergelson, E., Bergmann, C., Byers-Heinlein, K., Cristia, A., Cusack, R., Dyck, K., ... Nave, K.M., ... & Hannon, E. (2019). Quantifying sources of variability in infancy research using the infant-directed speech preference. *Advances in Methods and Practices in Psychological Research*.

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