



Infants' Perception of Faces and Speech: A Web-Based Study

Center for Children and Families

Samia Razvi, Madeline Hale, Virginia E. Strehle, Isabella B. Hernandez, Haley W. Davis, & Melanie J. Spence

SCHOOL OF BEHAVIORAL AND BRAIN SCIENCES, DEPARTMENT OF PSYCHOLOGY, THE UNIVERSITY OF TEXAS AT DALLAS

INTRODUCTION

- There is limited information validating the use of online platforms, such as *Lookit*, for virtual infant behavioral observation.^{2,3}
- Infant-directed speech (IDS) is characterized by higher frequency, more variable pitch contours, and simplified linguistic structures compared to adult-directed speech (ADS).¹
- Infants' preference for IDS over ADS is well-established. 1
- Multimodal inputs of IDS better promote language learning compared to unimodal inputs.⁴

RESEARCH QUESTIONS

- Can infants' well-established preference for IDS be reliably observed through the online platform *Lookit*?
- Will infants demonstrate looking preference for multimodal presentations of IDS over unimodal inputs?

METHODS

Online Session

Caregivers and typically developing infants between 3-5 months will access our study through *Lookit*, and their session will be recorded from their homes

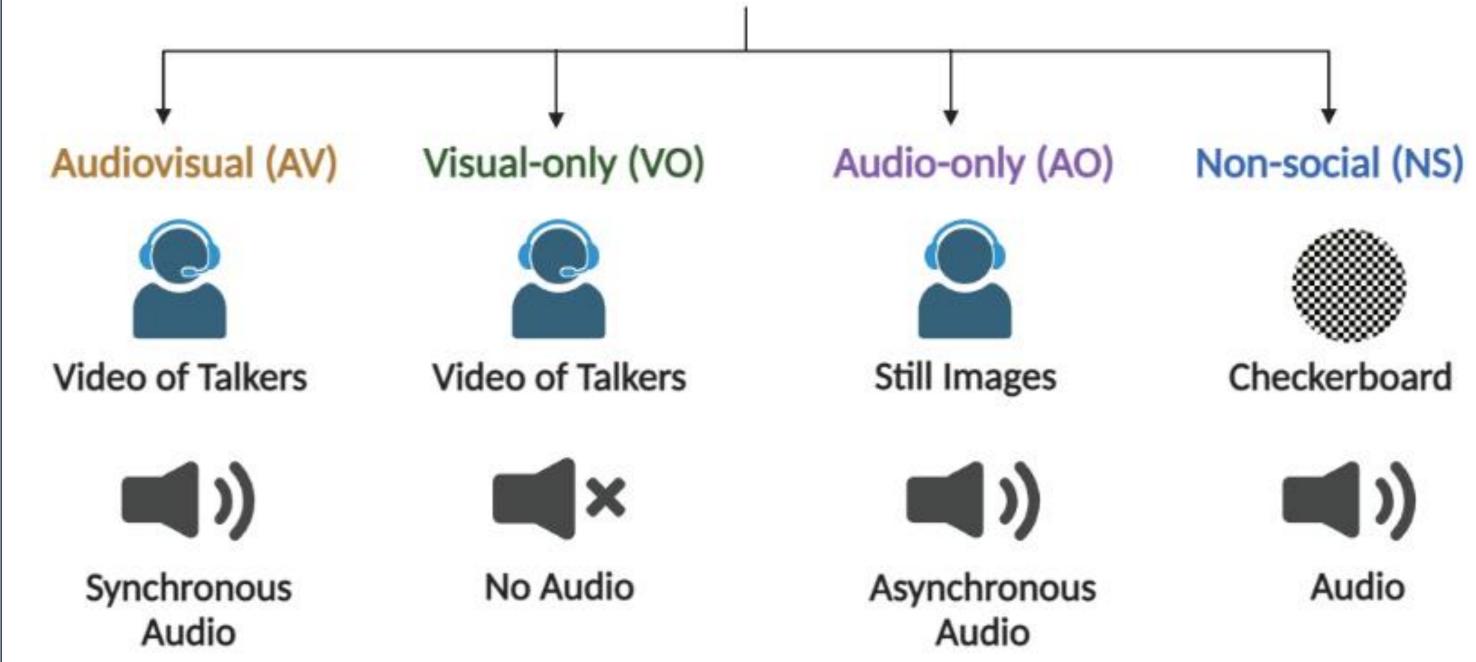


 Infants will be held by caregivers facing the computer screen and presented stimulus types of speech (audio-visual, audio or video only, and non-social) between-subjects and differing speech registers (IDS, ADS) within-subjects

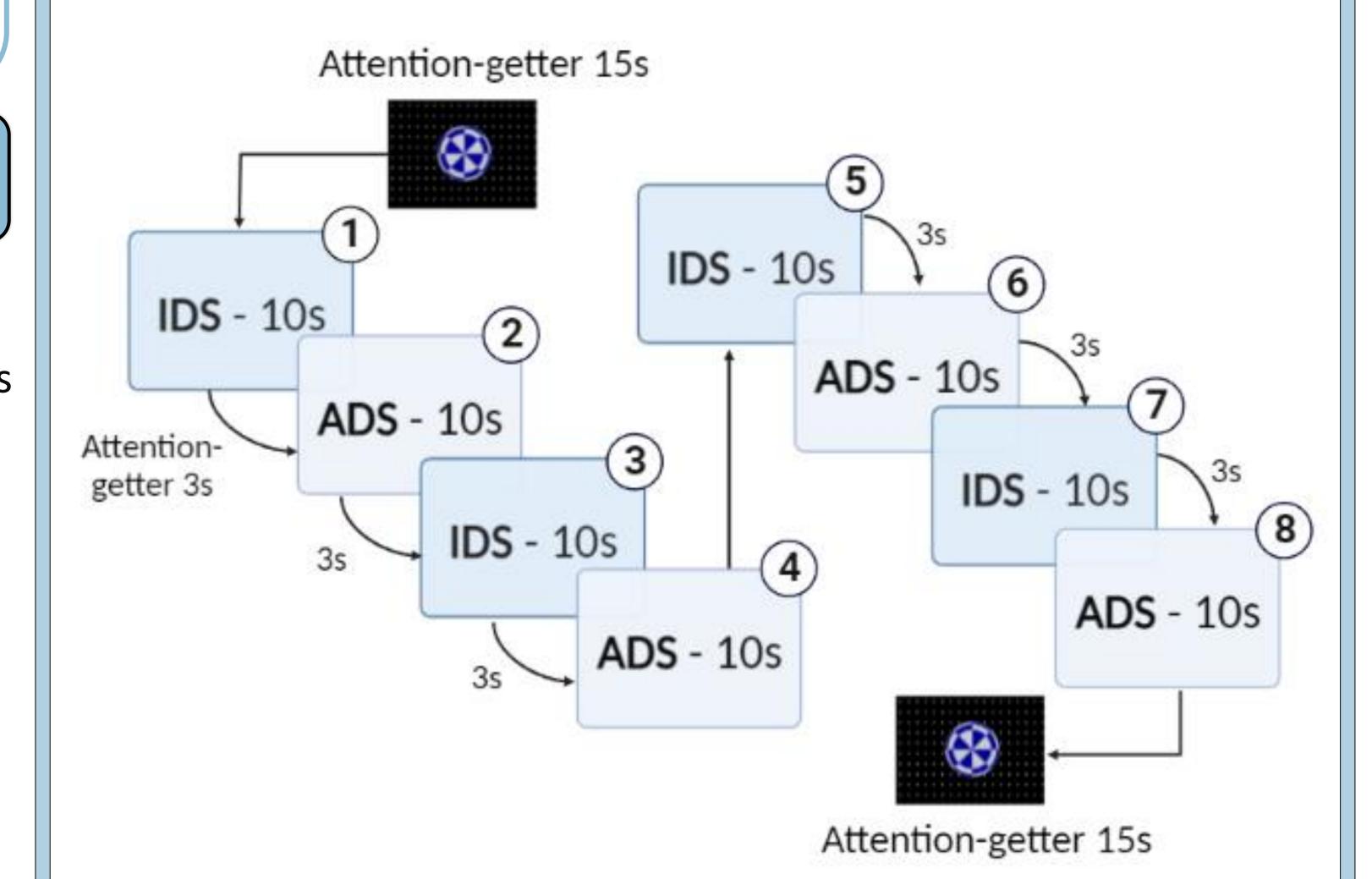
METHODS

Participants view eight 10-second video clips of mothers speaking in both IDS and ADS within a stimulus-type condition

Stimulus Types



Procedure



Measures:

 Total looking time will be blind coded by two raters based on the first look at the screen until the first continuous look-away exceeding one second

RESULT

Analytical Strategy: Two-way mixed ANOVA

Independent Measure:

- Stimulus type (AV, VO, AO, NS)
- Type of speech register (IDS vs. ADS)

Dependent Measure:

Total looking time

Hypothesized Results:

- H1: IDS preference can be accurately observed through Lookit
- H2: Multimodal inputs of speech will recruit more infant looking time than unimodal presentations of speech

DISCUSSION

- Findings can assess the feasibility of *Lookit* as a method for remote infant collection data outside the laboratory environment.³
- Results can illuminate how different types of stimulus presentations may be more effective at recruiting and directing infants' attention to the stimuli, thereby providing more information about the relative contributions of the visual and audio properties to infants' preferences for IDS.⁴

REFERENCES & ACKNOWLEDGEMENTS

- 1. Fernald (1985) *Infant Behavior and Development*
- 2. Eschman et al. (2022) Frontiers in Psychology
- 3. Scott & Schultz (2017) Open Mind
- 4. Golinkoff et al. (2015) *Current Directions in Psychological Science*

Special thanks to all the families who participated via *Lookit*, Dr. Shepard, Dr. Spence and the research assistants at the Infant Learning Project who made this study possible.

Email contact: haley.davis@utdallas.edu