



Infant-Directed Speaking and Singing: New Evidence from Eyetracking

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Introduction



Research on vocal interaction has accumulated the notion of an infant-directed (ID) register.

- **ID-Speaking**

- is characterized by heightened pitch, distinct and exaggerated pitch contours, and slower tempo.
- may promote attention and efficient learning.

- **ID-Singing**

- is characterized by heightened pitch, slower tempo, and a regulated pulse.
- may facilitate emotional communication and arousal regulation.



Introduction

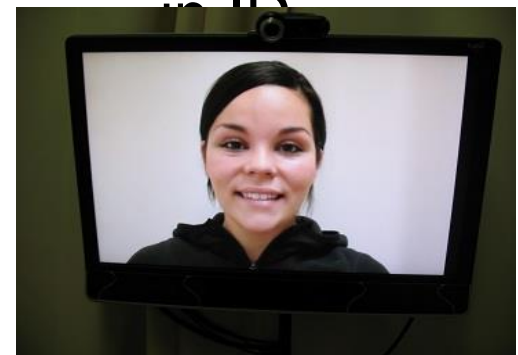


- To further investigate infants' responsiveness to these two vocal styles, the present series of studies ...

... introduced eyetracking to infants' looking

behavior

... presented a standardized, maternal source engaged speaking and ID-singing.





Study I & II

- Participants

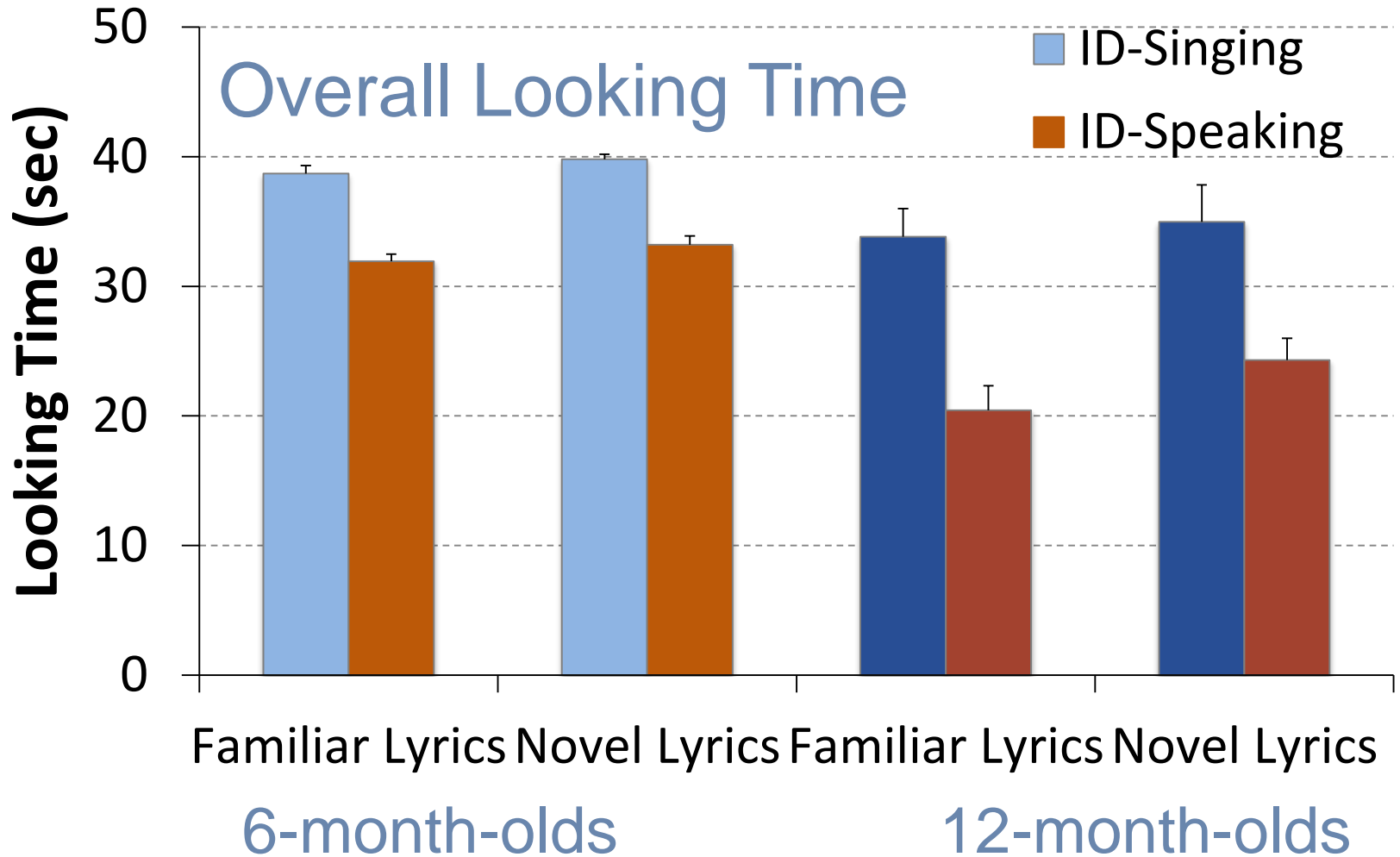
- Study I: 24 infants (12 female) between 5;13 and 7;06 months of age ($M = 6$ months, 13 days);
- Study II: 24 infants (12 female) between 10;15 and 12;03 months of age ($M = 11$ months, 17 days).

- Procedure

- Infants watched two short videos (48 sec each) of an adult engaging in ID-singing and ID-speaking
- Infants received one of two conditions:
 - ❖ Familiar lyrics (Itsy Bitsy Spider)
 - ❖ Novel lyrics (Baby Duck)

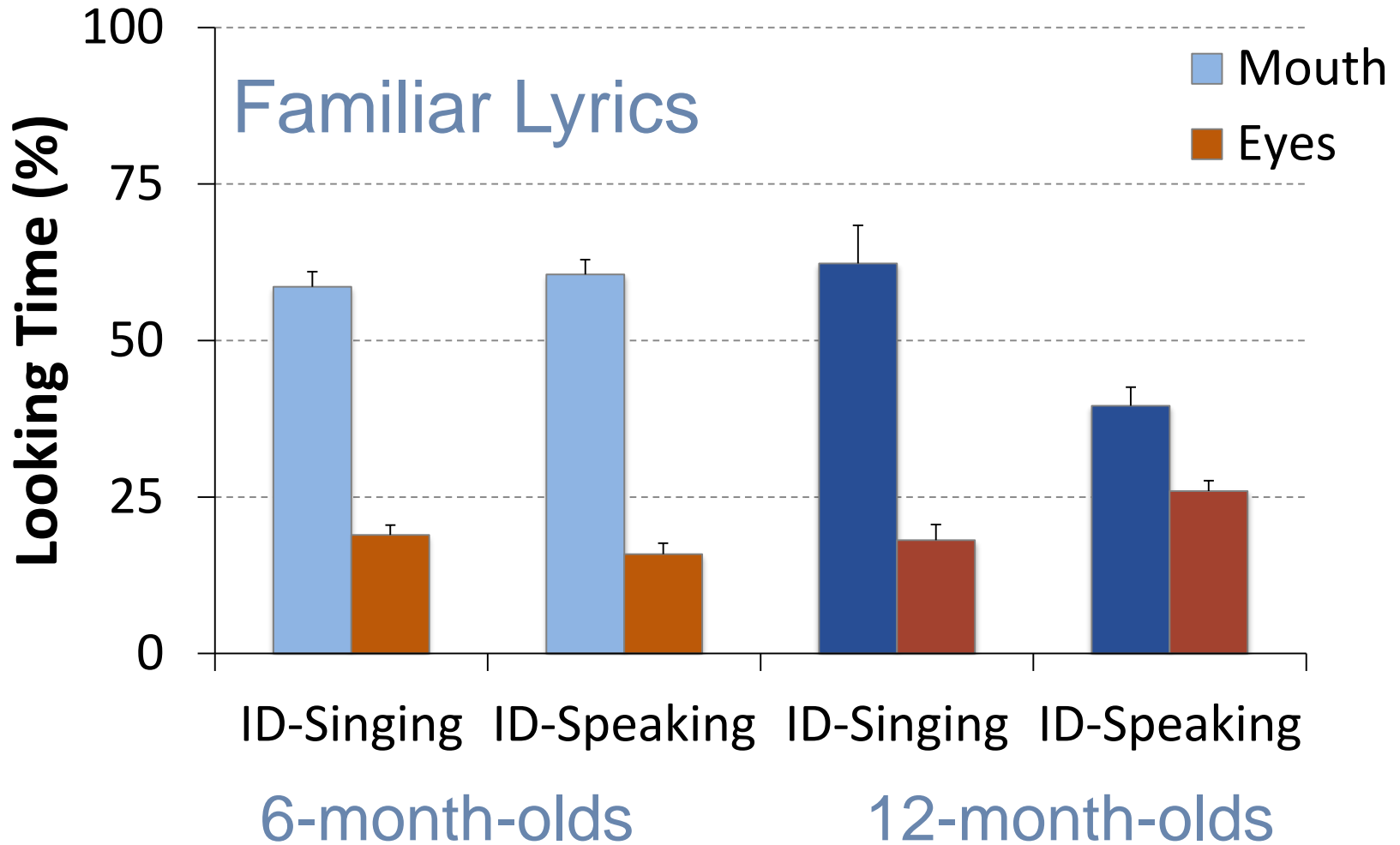


Results



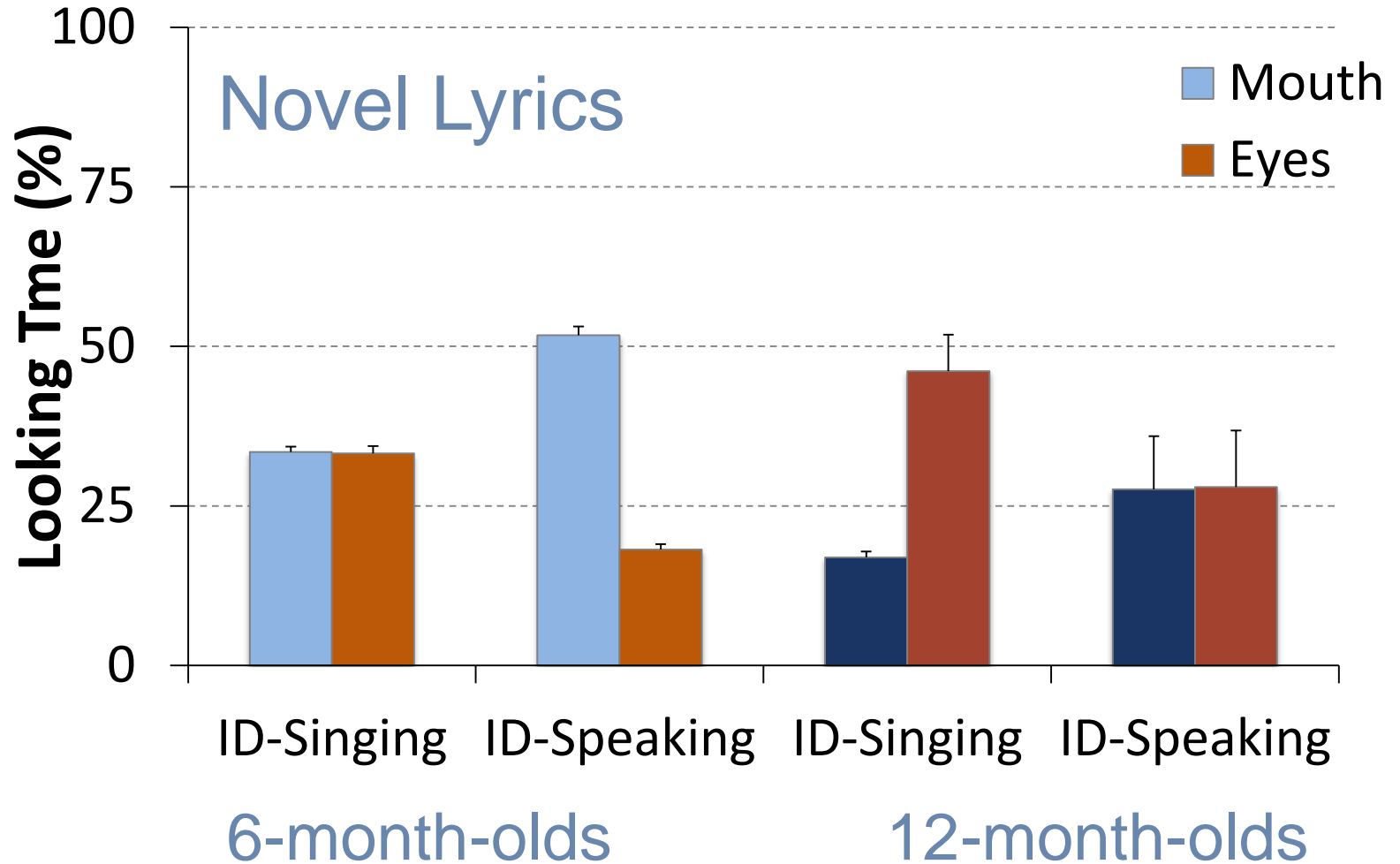


Results





Results





Study III



- Impact of melody and rhythm on infants' perception of ID-Speaking and ID-Singing
 - Here we are presenting 6-month-olds with videos contrasting familiar and novel lullabies.
 - ❖ Familiar lyrics (Rock a bye Baby)
 - ❖ Novel lyrics (The Moon has Risen)
 - **Question:** Will differences in melody and rhythm lead to differences in looking behaviour compared to the play songs of Study I?





Study IV

- Impact of melody and rhythm on infants' perception of ID-Speaking and ID-Singing
 - Here we are presenting 6-month-olds with videos contrasting exhilarating ID-speaking and calming ID-speaking.
 - **Question:** Will distinct features in rhythm lead to differences in looking behaviour compared to the exhilarating ID-singing and calming ID-singing of Study I & III?





Study V



- Impact of source familiarity on infants' perception of ID-Speaking and ID-Singing
 - Here we are presenting 6-month-olds with live videos, contrasting their mothers and a stranger engaging in ID-speaking and ID-singing.
 - **Question:** Will infants show higher overall engagement when presented with a familiar source compared to a stranger and will ID-speaking and ID-singing be affected equally?





Acknowledgement



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