Meaningful Interactions Between Infants and Individuals
A Study of Visual Experiences in the Home Environment

INTRODUCTION

• **Human faces have a central role in social interactions.** Our faces provide information about our identity, age, gender, about our emotions, and intentions.

• **Infants are drawn to faces,** shortly after birth infants prefer to look at face-like over non-face-like stimuli.

• **Decreasing face density,** the frequency of faces in view decreases from birth to 2 years of age. Jayaraman et al (2017)

• **Face experience,** unknown how much of an infant’s experience with a face is simply having a face in view, or whether the experience is meaningful interaction (Sumarga et al, 2016).

• **The purposes of this study** are to:
  - replicate Jayaraman et al (2017) face density findings,
  - to determine what proportion of each infant’s face experience is meaningful interaction
  - to determine whether age predicts such interactions.

METHOD

• 3- month old (N=1) and 20- month old (N=1) at home with caregiver in their natural environment.

• Head–mounted first person scene cameras recorded the infants’ approximate field of view.

• Three hours of video from each participant were coded for the presence of faces in view using Adobe Premiere Pro.

• Portions containing faces were further coded for whether the faces meaningfully interacted with the participant as defined by if the individual was playing with (e.g., playing a game, reading a book, etc.), or speaking to the child.

RESULTS

• Consistent with Jayaraman et al. (2017), the younger, 3 month old infant’s visual experience contained higher face density (26%) than the older 20 month old infant (20%).

• However, it was surprising to find that the older child had approximately triple the meaningful interaction time (6%) than the younger child did (2%).

CONCLUSION

• We propose that early infant experience is characterized by quantity to build facial recognition, while later infant experience is based on high quality interactions which may facilitate language learning.

• Future directions:
  - increase our sample size, code more children at different ages (e.g. 3.5 months and 18 months) to study the relationship between age and meaningful face views.
  - Compare the meaningful face experience of the Bloomington infants to our sample of Infants from India.

REFERENCES

