

INTRODUCTION

- Five-month-olds prefer to look at people who speak their native language rather than a foreign language (Kinzler et al., 2007).
- In other social categories (e.g., race), the visual preference for members of the familiar category often disappears or reverses around 9 months of age (Liu et al., 2015).
- Past studies generalize from static stimuli (i.e., faces), but people are intentional agents who are constantly performing actions.

Research questions

- Does the visual preference for native language speakers **change through development**?
- Does the type of stimuli used (**static pictures vs dynamic videos**) influence how infants attend to speakers of different languages?

PARTICIPANTS

ONLINE STUDY on Lookit (Scott & Schulz, 2017)

- Study 1**
 - 32 3- to 6-month-olds ($M_{age} = 5m\ 1d$)
 - 32 8- to 11-month-olds ($M_{age} = 9m\ 7d$)
- Study 2**
 - 32 8- to 11-month-olds ($M_{age} = 9m\ 3d$)

REFERENCES

Kinzler, K. D., Dupoux, E., & Spelke, E. S. (2007). The native language of social cognition. *Proceedings of the National Academy of Sciences*, 104(30), 12577–12580. <https://doi.org/10.1073/pnas.0705345104>

Liu, S., Xiao, W. S., Xiao, N. G., Quinn, P. C., Zhang, Y., Chen, H., Ge, L., Pascalis, O., & Lee, K. (2015). Development of visual preference for own-versus other-race faces in infancy. *Developmental Psychology*, 51(4), 500–511. <https://doi.org/10.1037/a0038835>

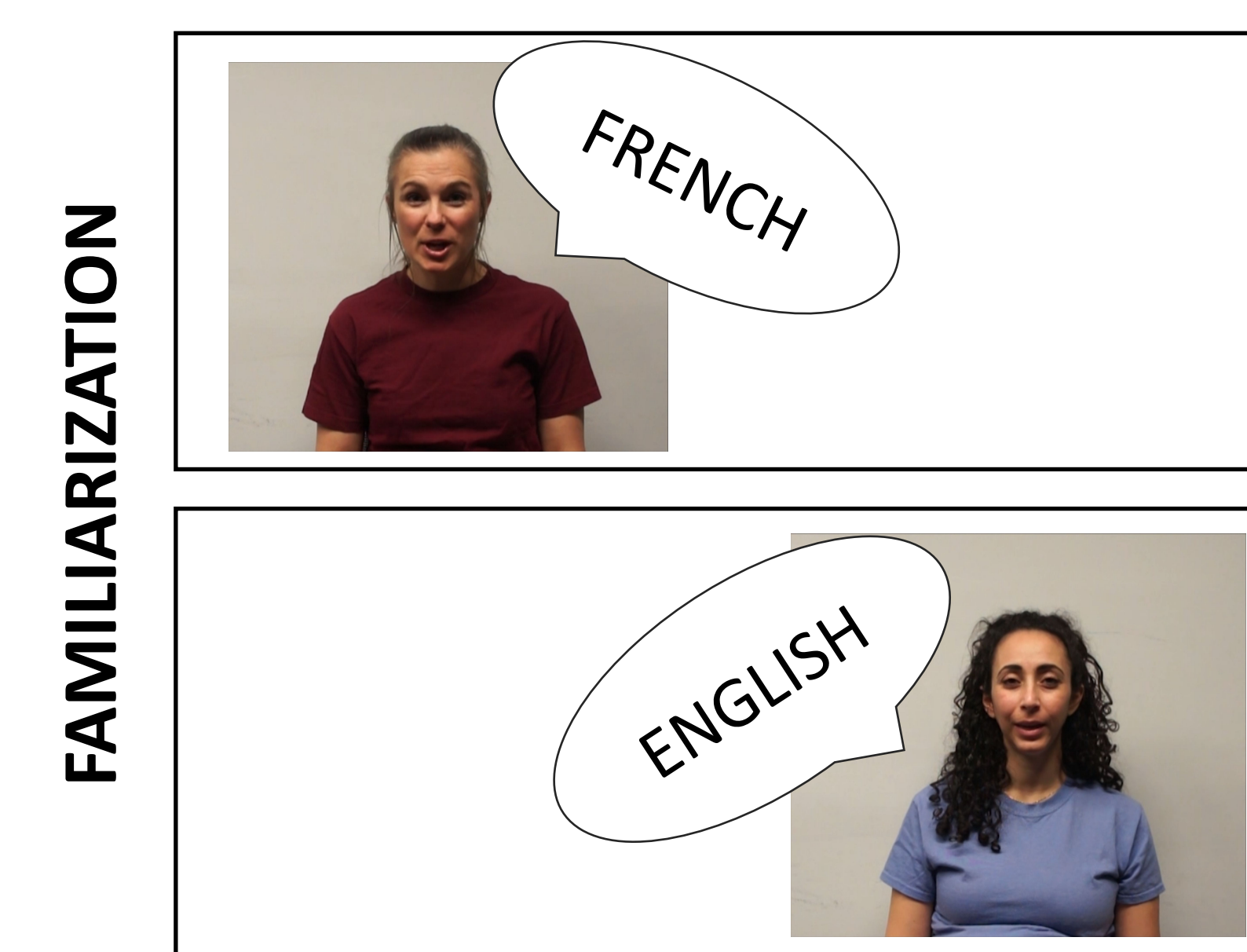
Scott, K., & Schulz, L. (2017). Lookit (Part 1): A New Online Platform for Developmental Research. *Open Mind*, 1(1), 4–14. https://doi.org/10.1162/OPMI_A_00002

METHOD

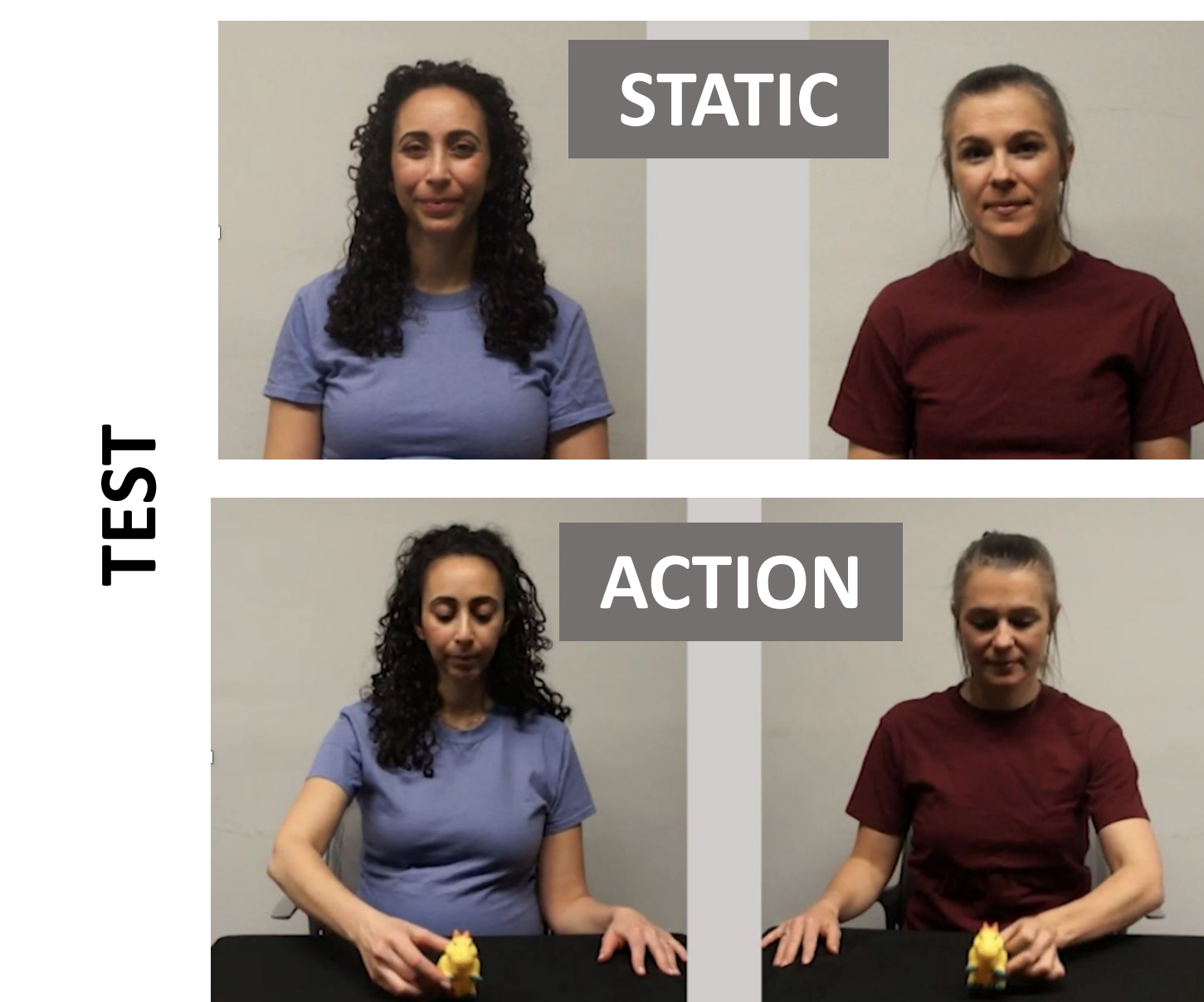
Study 1: 3 Blocks; Study 2: 2 Blocks

Structure of each Block :

1) Calibration; 2) Familiarization; 3) Test



Each fam trial = 4s
1st Block: 2 trials per speaker
2nd and 3rd Block: 1 trial per speaker



Each test trial = 6s
2 trials of each test type per block

ACKNOWLEDGEMENTS

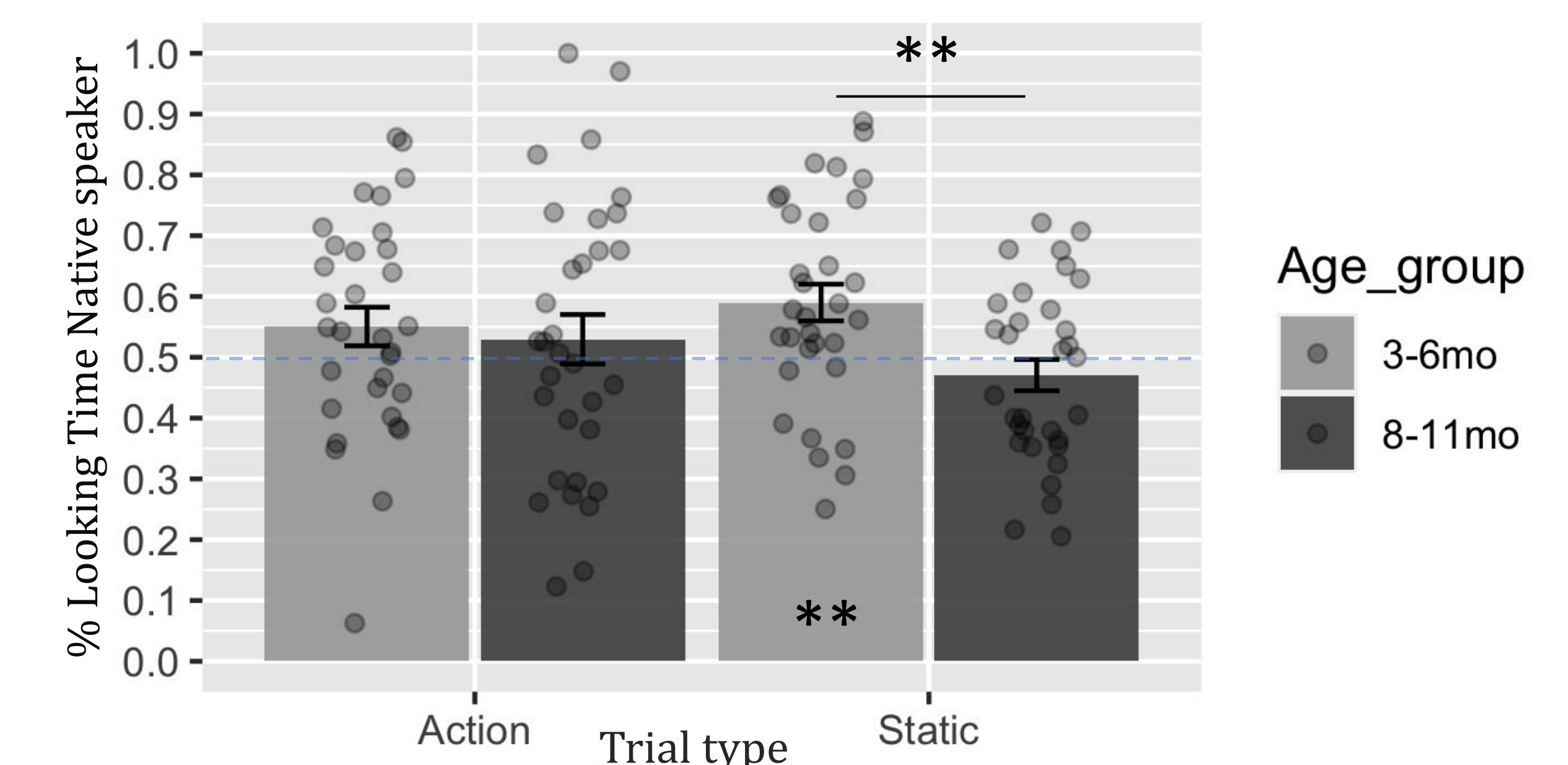
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RESULTS



(A) Main analysis (pre-registered)

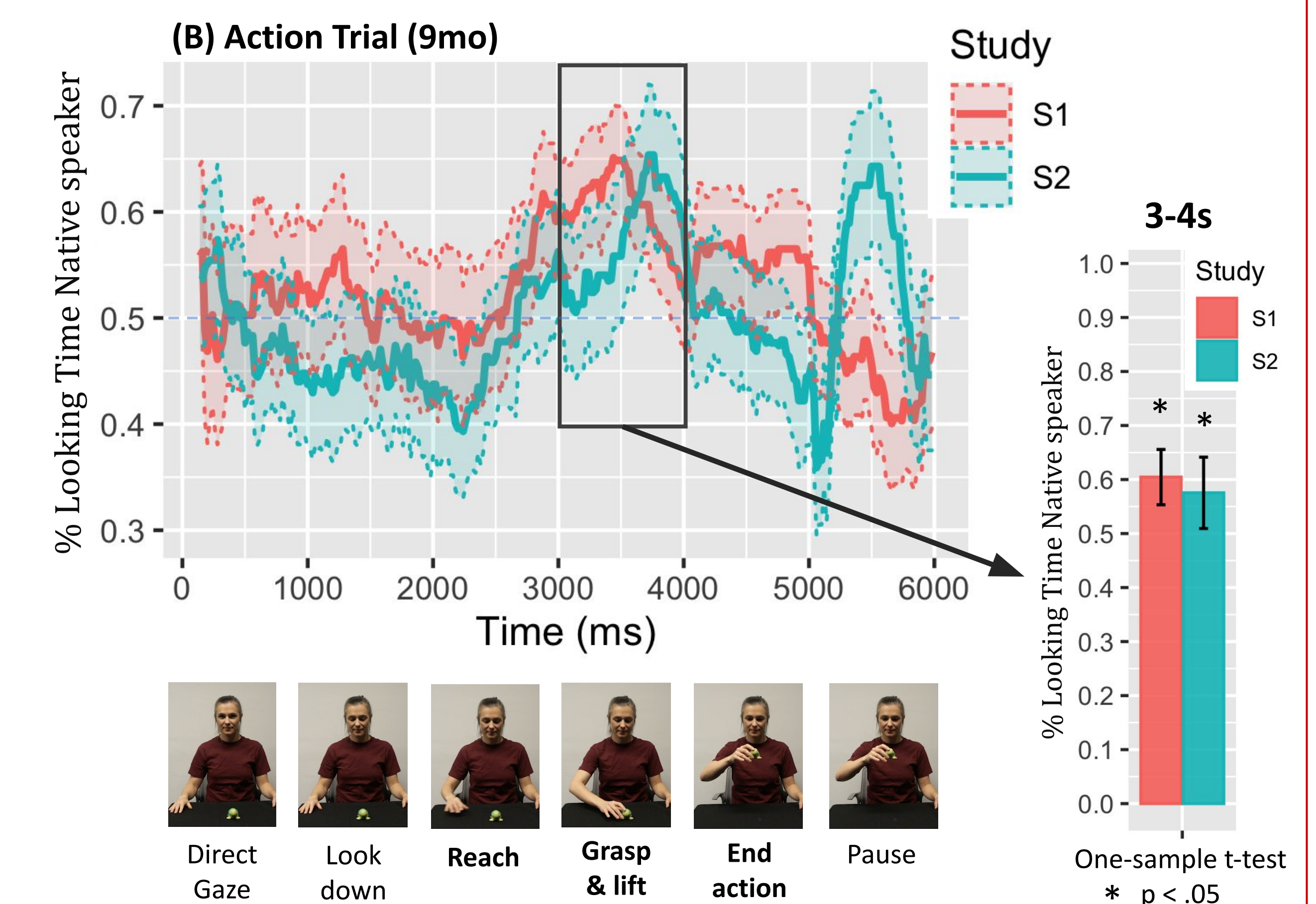
- Age * Trial type ($p = .04$).
- Age differences only in Static trials ($p < .01$).
- Static trials: Native speaker bias at 5 months ($p < .01$), but not at 9 months.



(B) Time Course for Action trials

1. Study 1: Exploratory analysis

- 9 mo:** Native speaker bias that was time-locked to the moment when speakers grasped and lifted the toy (3-4s window).
- 5 mo:** No clear time-locked preference (and no difference between static and action trials).



2. Study 2 (9 mo): Pre-registered

- Replicated Native speaker bias during 3-4s of Action trials.

DISCUSSION

- There is a **developmental change** in infants' visual preference for native language speakers.
- Infants at 5 months, but not at 9 months, preferred to look at native language over foreign language speakers when presented with static stimuli.
- At 9 months, infants' selective attention may be more strategic and nuanced: they showed a bias for native language speakers when tracking others' goals, but not in other situations that were less informative or relevant.