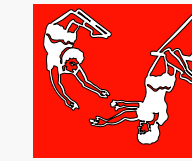


Socially Guided Observational Learning: Children Learn More From Overheard Speech When It's Addressed to Their Mothers

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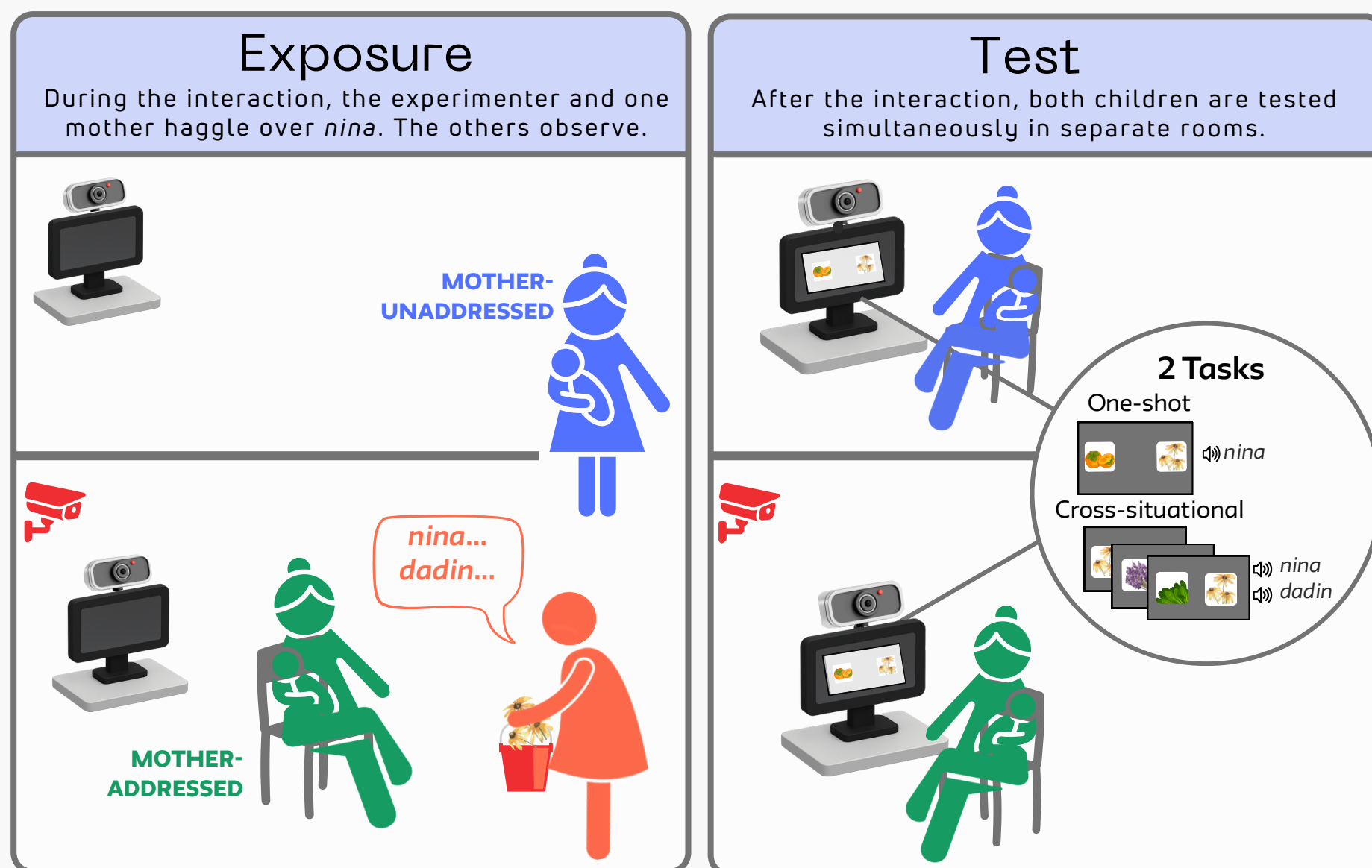
BACKGROUND

- Child-directed speech (CDS) is thought of as the gold-standard of input for language-acquisition.
- Yet in contexts where direct address is rare, children acquire language almost entirely through observation.^{1,2,3,4}
- *When does overheard speech become usable language-learning input?*
- Existing work focuses primarily on cognitive and developmental factors.⁵
- Our focus: Children's close social partners, by attracting their attention,⁶ may determine which overheard conversations become meaningful sites of learning.

METHOD

Participants

- 75 mother-child dyads from Chiapas, Mexico.
- Final sample: $N = 68$ [10–41 months, $M = 28.38$, $SD = 7.51$].



Coding and Variables

- Videos of children's gaze were recorded for later coding of left/right looking time.
- Proportion of target-looking time is used to index word-recognition.^{7,8}

STIMULI

One-Shot
Children view side-by-side images of *nina* (right) and a distractor, while audio asks 'where is the *nina*?'

🔊 Banti ay te *nina*?

Cross-Situational
Over 28 trials, children view ambiguous pairs of images drawn from the novel words used in the interaction (*nina*, *dadín*) and two more novel words (*soman*, *tani*).

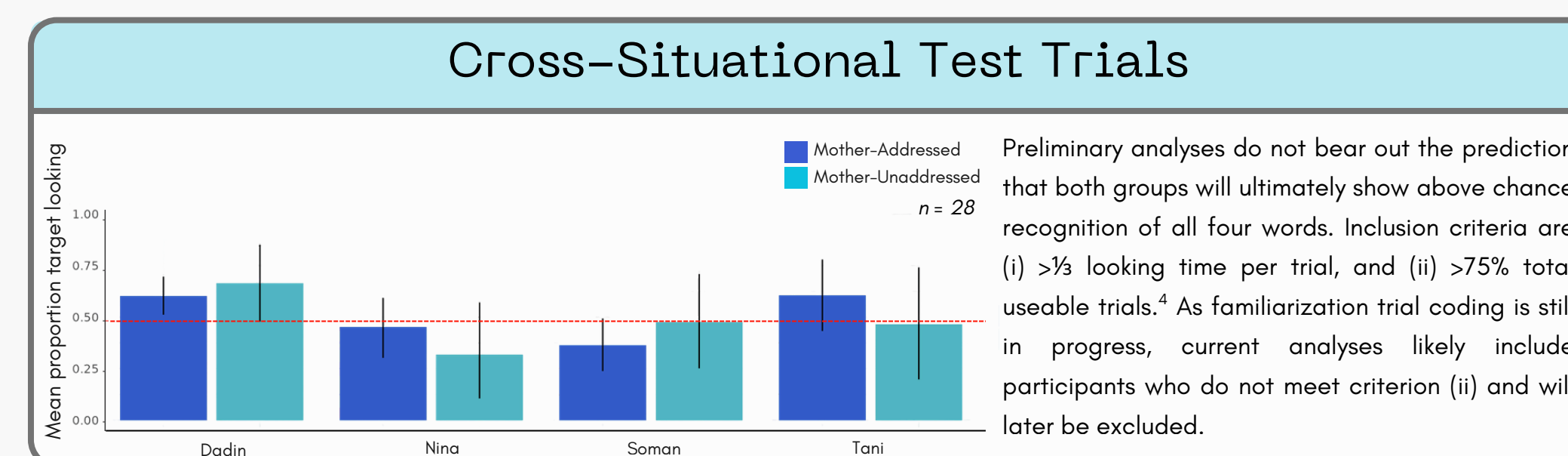
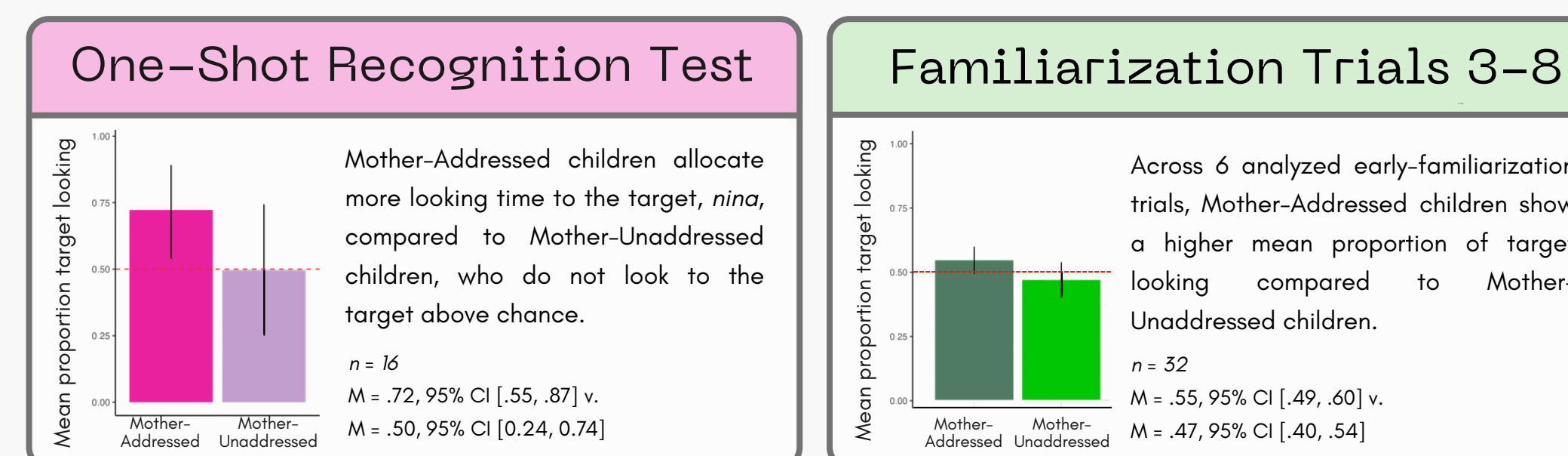
HYPOTHESES

- H1:** All children will learn all four words by the end of test.⁷
- H2:** Close social partners attract attention, creating early learning advantages for Mother-Addressed children.

Predictions

- Mother-Addressed children will show greater one-shot recognition of the novel word *nina*, and
- Earlier evidence of cross-situational learning.⁹
- By the end of training, both groups will show above chance recognition of all four words.

RESULTS



DISCUSSION

- Results challenge accounts of Tselal children as 'expert' overhearers whose learning is not generalizable evidence of the contribution of overheard input to language-acquisition.¹⁰
- Instead, Mother-Addressed Tselal children had significant advantages over Mother-Unaddressed children, who did not show word-recognition above chance.
- This suggests social relationships structure observational learning.

FUTURE DIRECTIONS

- Measure attention directly using (i) gaze-data from interaction videos and (ii) physiological measures of attention to speech.¹¹
- Analyze interactions to examine unaddressed mothers' attention, qualities of experimenter-mother interaction, and their relationship to children's learning.
- Investigate if social closeness boosts attention not only to the interaction but also during tasks.
- Further research should establish whether social closeness similarly structures observational learning in CDS-rich environments where its role is likely underestimated.

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