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Background

- The other race effect (ORE) develops around 9 months of age, advantaging processing and recognition faces of one's own race over faces of another race¹.
- Greater exposure to diverse racial groups may decrease the likelihood of the ORE^{2,3}.
- Research on the ORE has focused on racial majority infants, raising questions about whether racial minority infants' likely increased exposure with own-race minority and other-race majority faces decreases the presentation of the ORE.
- Objective:** Investigate the ORE in 9- to 12-month-olds from underrepresented racial minority (URM) groups across the U.S. in response to majority race (i.e., White) or other URM race faces

Hypotheses

- Infants were not expected to demonstrate the ORE to White faces, based on their predicted increased exposure to own-race and majority-race faces in their everyday lives.
- Infants were expected to show the ORE to other-race URM faces due to predicted limited exposure to these groups.

Method

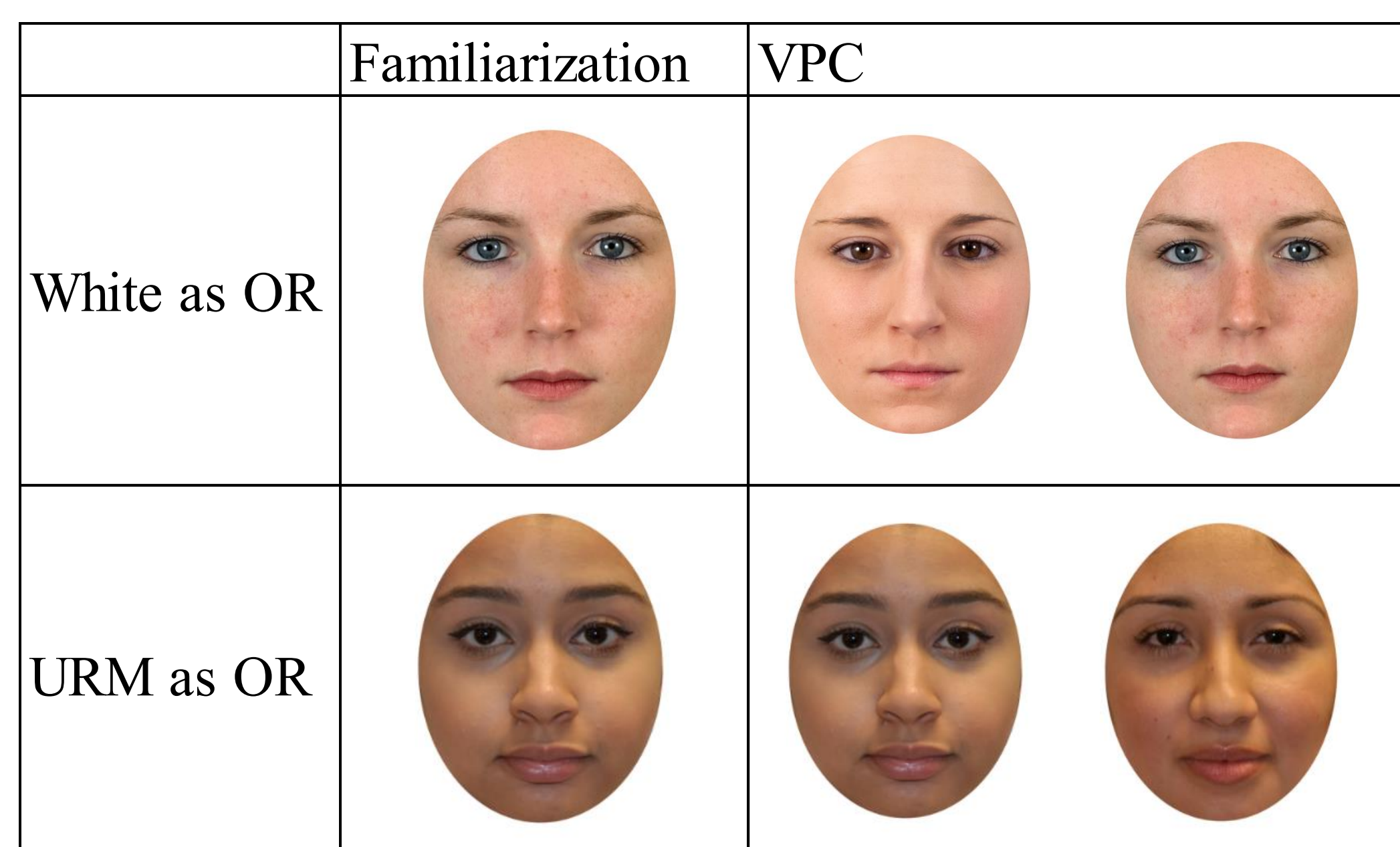
Participants: 41, 9- to 12-month-old URM infants ($M = 315.66$ days) from the United States tested through Children Helping Science (3 additional infants excluded for insufficient looking).

- Gender:** 24 female & 17 male
- Race:** 9 Latine, 5 Black, 8 East Asian, 1 Middle Eastern/North African, 2 South Asian, 16 Bi- or Multiracial

Procedure:

- Two sets of familiarization (30 s) and visual paired comparison (VPC) trials (10 s)
 - One set of own-race faces
 - One set of other-race faces - either a set of White faces or URM faces of another race than the participant
 - $N = 21$ viewed White faces; $N = 20$ viewed URM faces

Data Processing: Looking times to stimuli coded on Datavyu.⁴



Note: Stimuli included faces of White, Black, Asian, Middle Eastern, Hispanic, Hawaiian/Pacific Islander, and Multiracial women

Measures of Exposure to Diversity

- Parents reported infant demographic information, zip code, and exposure to racial diversity
 - Exposure to own- and other-race individuals scored as 1 (less than monthly), 2 (monthly), 3 (weekly), 4 (daily)
- The Hirschman-Herfindahl Index (HHI) was calculated using American Community Survey data to obtain the probability that two random individuals in the same zip-code have the same racial identity to measure residential diversity exposure⁵.

Statistical Analyses: Proportions of looking in each condition were examined using one-sample t-tests to identify novelty or familiarity preferences.

Results

Diversity Exposure

- Participants had greater contact with White ($M = 3.071$, $SD = 0.829$) than other-race URM faces ($M = 1.492$, $SD = 0.371$), $p < .001$
- HHI and exposure to diversity uncorrelated with looking

Other Race Effect

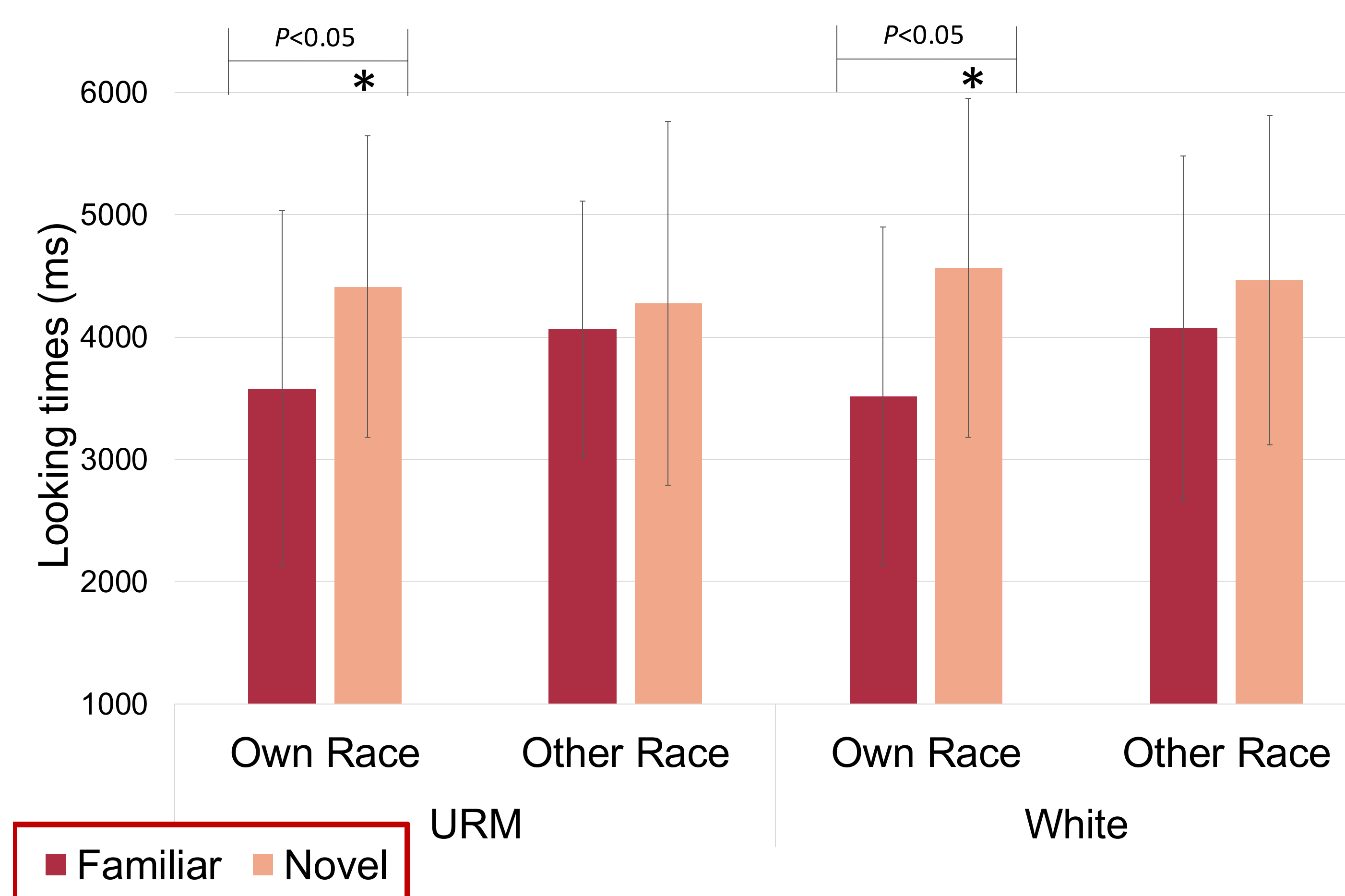
Across participants, observed longer looking at novel than familiar own-race faces, $t(36) = 3.154$, $p = .002$, no differences were seen to novel and familiar other-race faces

ORE: URM Other-Race Condition

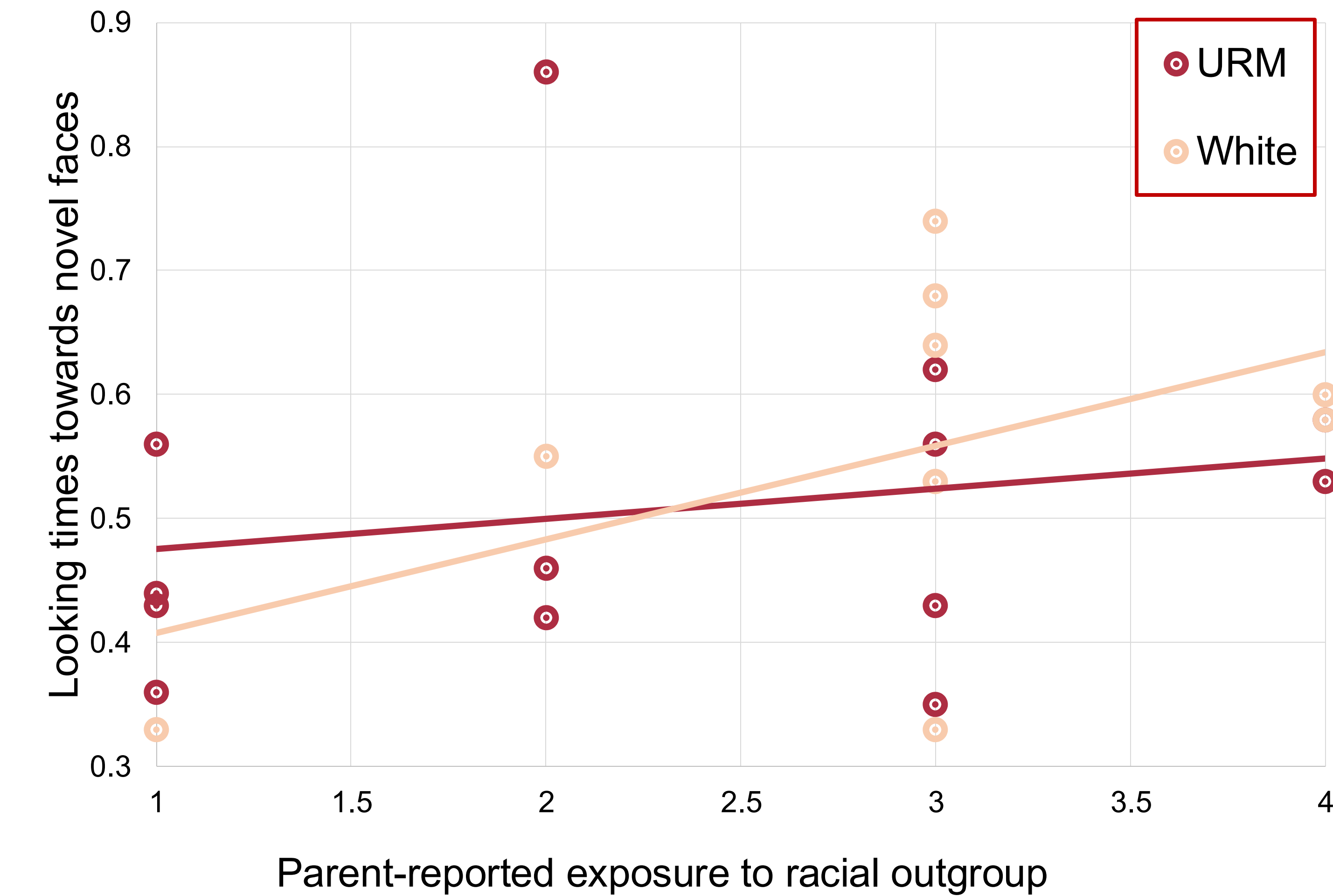
Infants showed a novelty preference for own-race faces, $t(17) = 1.963$, $p = .033$, but did not discriminate novel and familiar other-race URM faces

ORE: White Other-Race Condition

Infants showed a novelty preference for own-race faces, $t(18) = 2.434$, $p = .013$, but did not discriminate novel and familiar other-race White faces



Note: Looking times (ms) to familiar and novel other-race and own-race faces in other-race White and URM conditions.



Note: Proportion of looking at other-race novel faces by parent-reported exposure to racial outgroup presented as the other-race stimulus

Discussion

- Contrary to our hypothesis, participants demonstrated the ORE to both White and URM other-race face presentations
 - Although participants reported significantly higher contact with White compared to other URM groups, this was not sufficient to facilitate recognition of White faces**
- Zip-code level diversity and parent-reported contact with racial and ethnic outgroups did not impact infant looking behavior**, although parent-reported exposure to the other-race stimulus was weakly positively correlated with looking to the novel other-race face ($r = .33$, $p = .13$) in our preliminary dataset
- This study is one of the first to focus on face recognition and the ORE in URM infants, offering insight into the generalizability of the ORE and experience-dependent shaping of the ORE through social exposure**
- Data collection is ongoing, future analyses will consider links between exposure to racial/ethnic diversity, participant mono- and multi-racial identity, and the ORE in a larger sample

This research is supported by Loyola University Chicago and the Provost Fellowship.

References

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