Racial Biases in Early Childhood and How to Reduce Them

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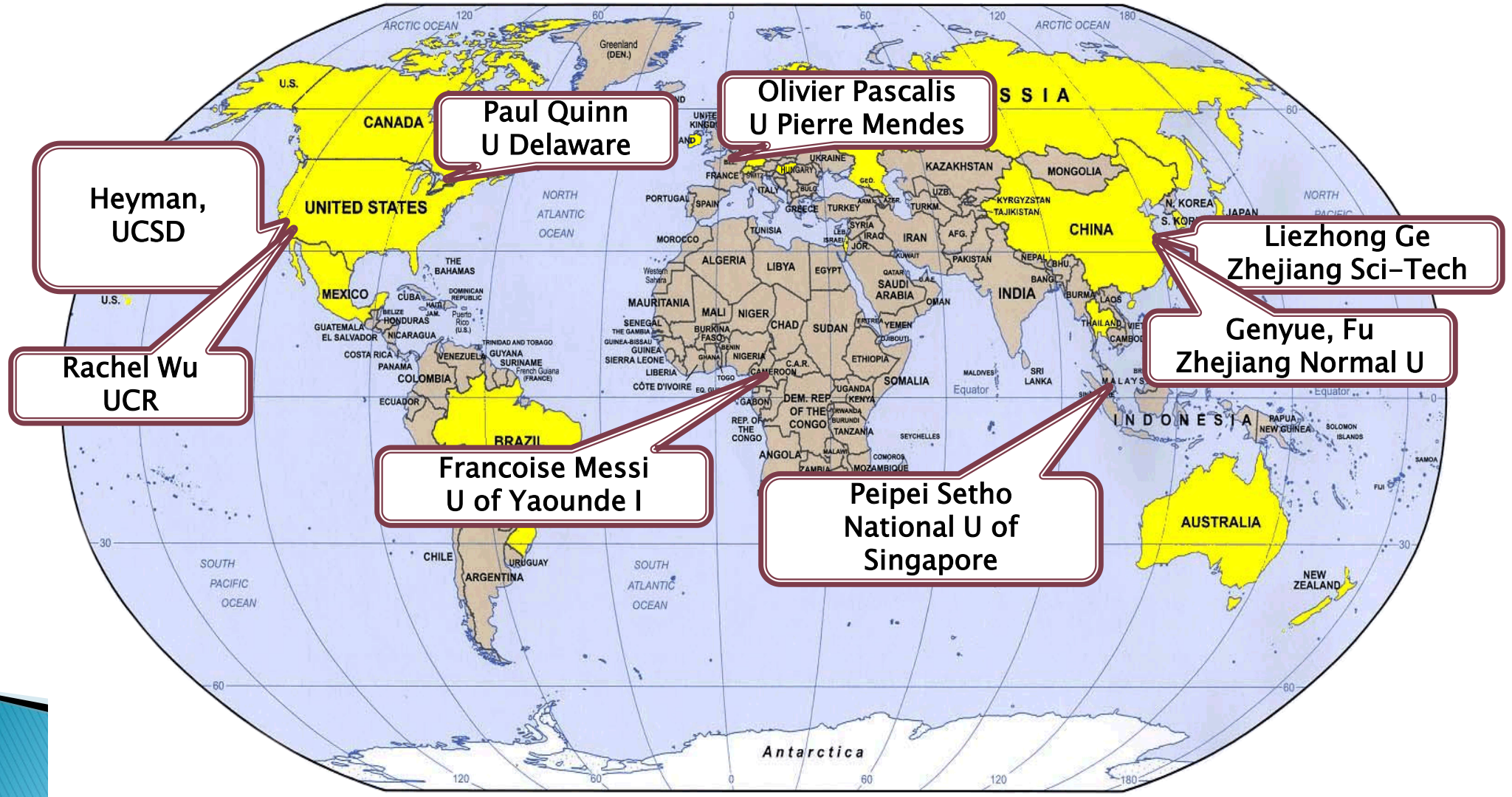
Acknowledgement

- National Institute of Health (NIH), US
- Natural Sciences and Engineering Research Council of Canada (NSERC)
- Canadian Foundation for Innovation (CFI)
- National Science Foundation of China (NSFC)

Collaborators

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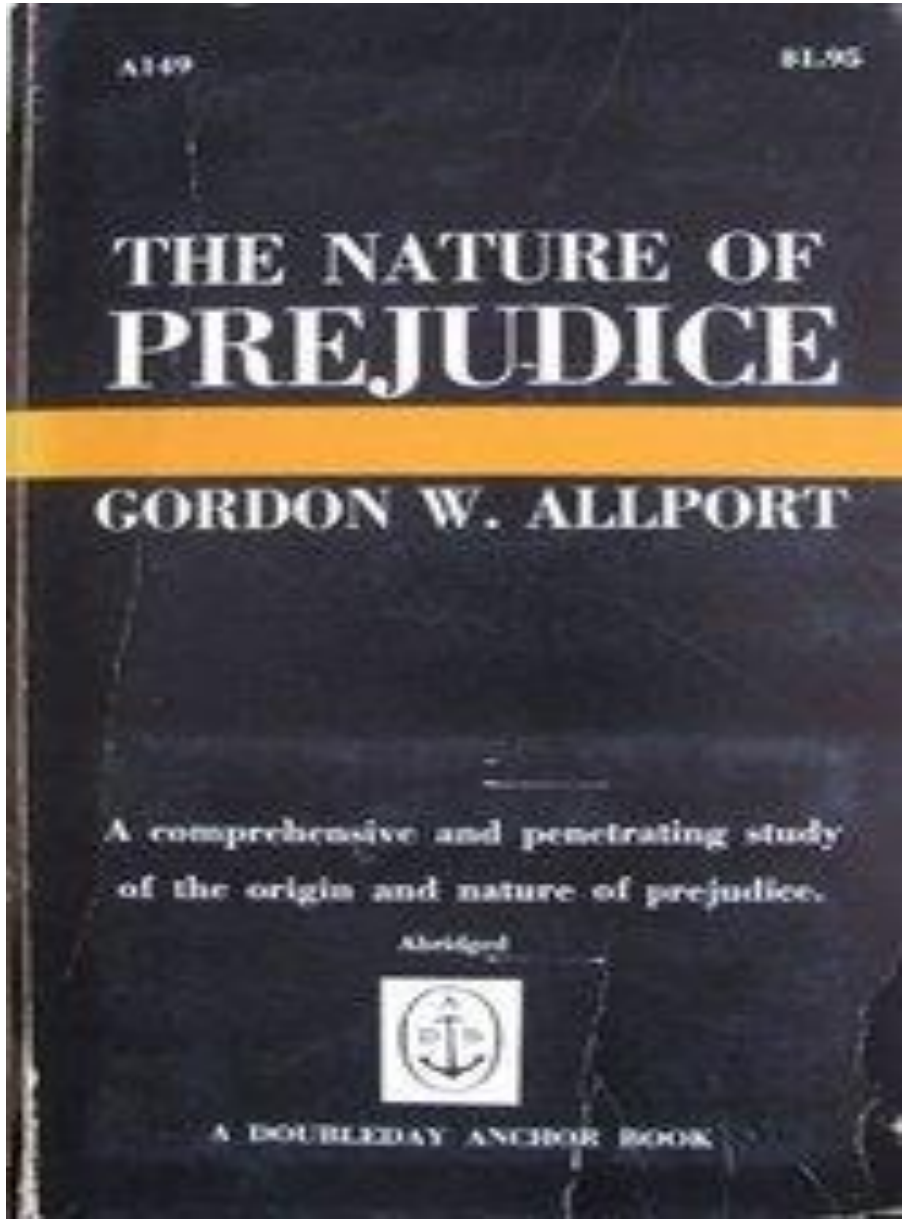
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THE NATURE OF
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GORDON W. ALLPORT
A comprehensive and penetrating study of the origin and nature of prejudice.
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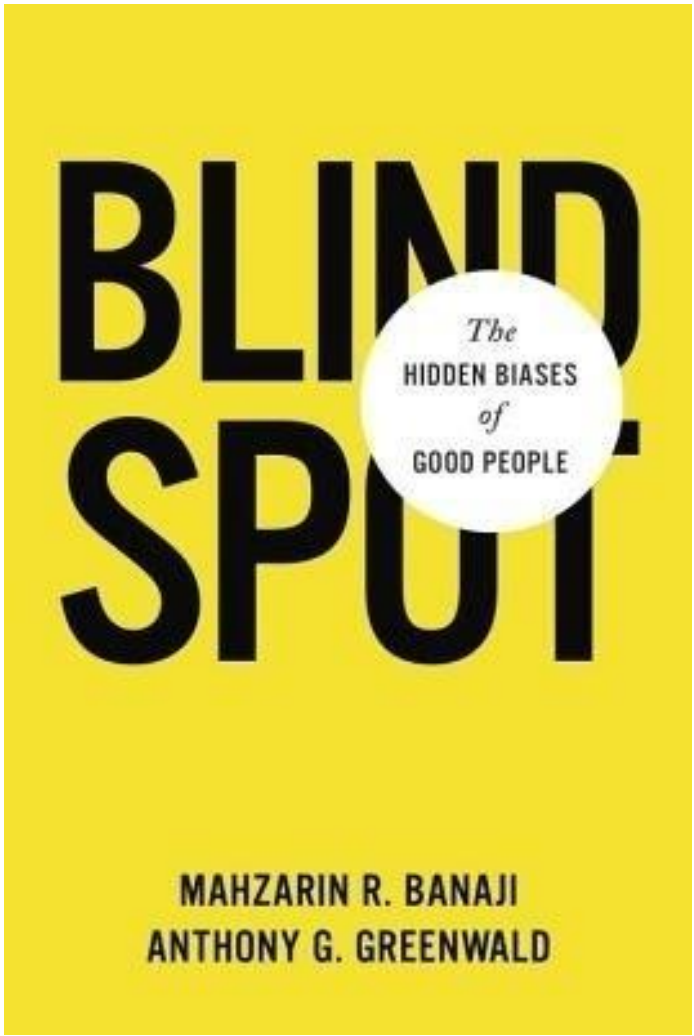
BLIND
SPOT


BLIND
SPOT
The
HIDDEN BIASES
of
GOOD PEOPLE
MAHZARIN R. BANAJI
ANTHONY G. GREENWALD

Racial biases

- Explicit biases
  - Attitude
  - Stereotype
  - Discrimination
- Implicit biases
  - Attitude
  - Stereotype
  - Discrimination

- Racial biases affect their targets negatively in all spheres of human life including politics, law, employment, health, education, science, & dating

Existing findings

- At which age do children begin to show explicit racial biases?
- At which age do children begin to show implicit racial biases?
- Do parents play any role in the development of racial biases?
- Does children's cognitive development play any role?
- Are there any effective methods to reduce racial biases?

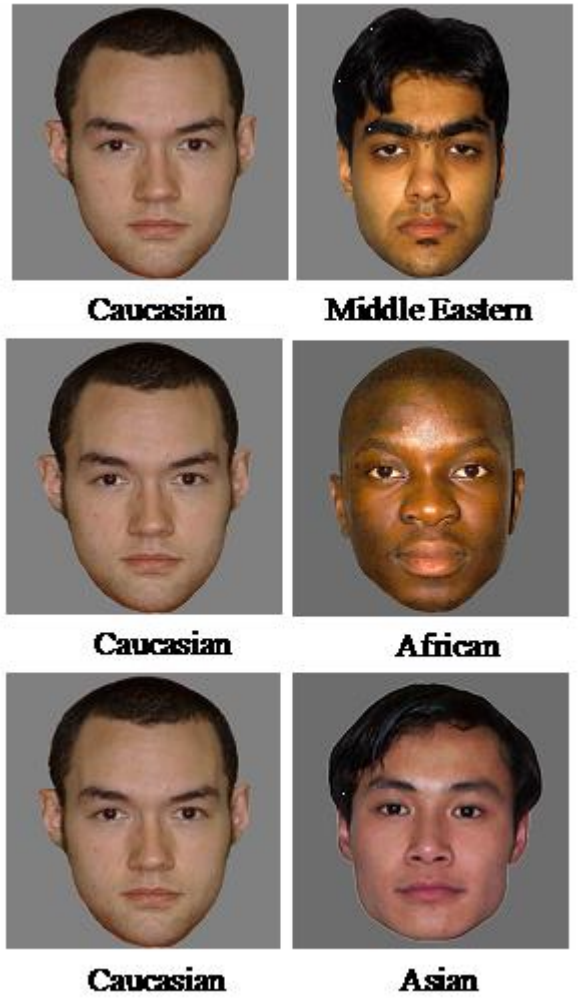
Perceptual to Social Hypothesis

- Early asymmetry in perceptual experience with own- vs. other-race faces have downstream social consequences, including implicit racial biases.
- Enriching early cross-race perceptual experiences should lead to reduction of implicit racial biases

Race Preference

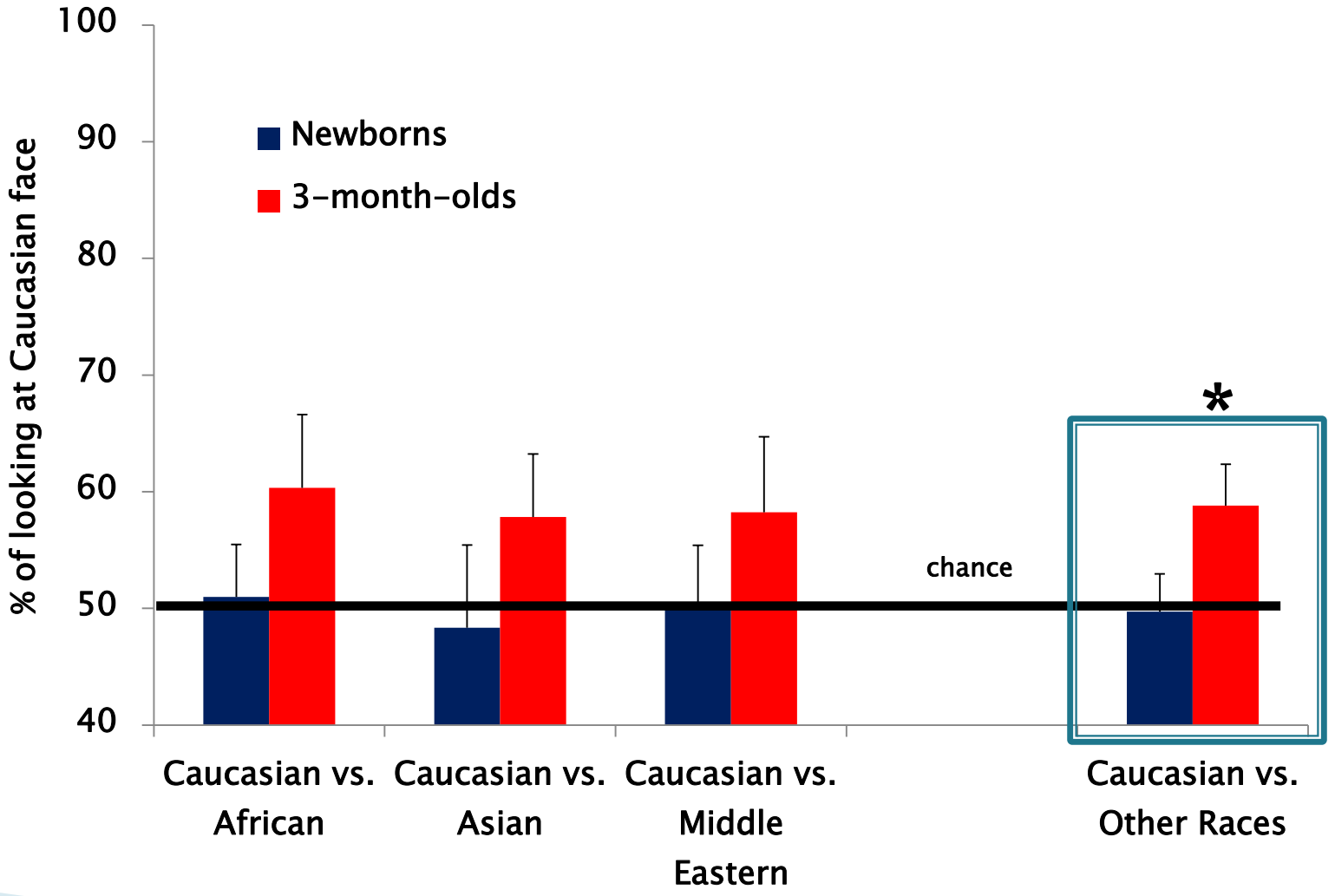
Study 1.1. Caucasian Infants' Face Race Preference

- Question: Do Caucasian infants show spontaneous own-race face preference?
- Participants
  - 48 Caucasian newborns
  - 48 Caucasian 3-month-olds
- Procedure
  - Two 10s trials
    - A male Caucasian own face vs. a male other race face
    - A female Caucasian own face vs. a female other race face
    - Conditions
      - Caucasian vs. Asian Condition (N = 16)
      - Caucasian vs. Middle Eastern Condition (N = 16)
      - Caucasian vs. African Condition (N = 16)



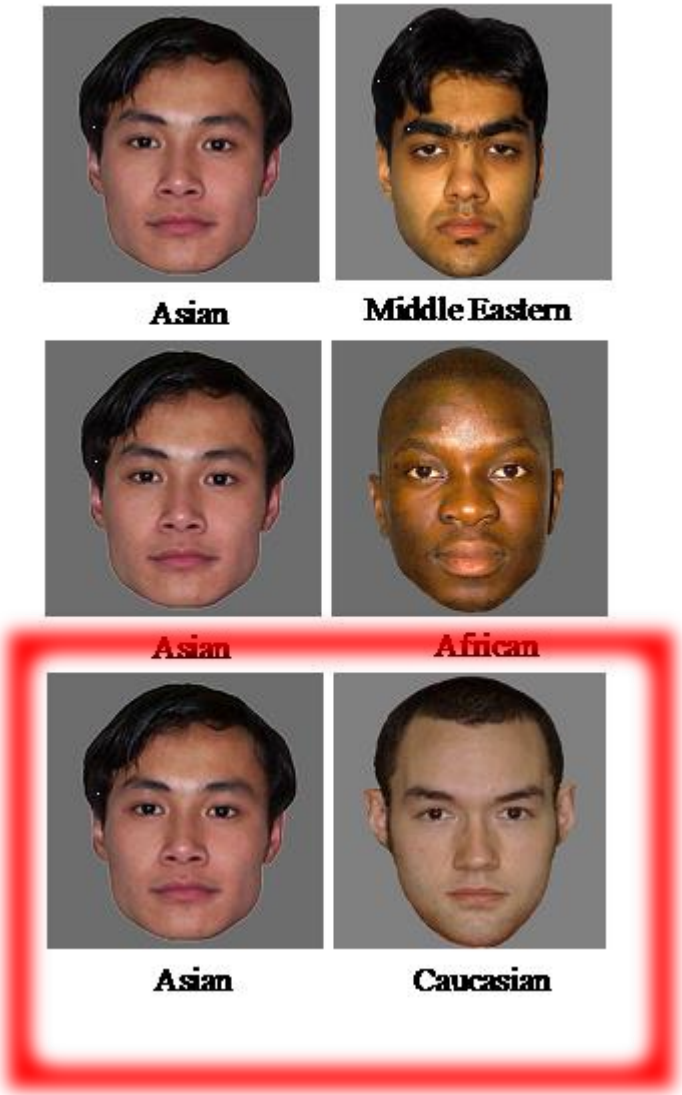
Kelly et al. (2005). Developmental Science

% Looking Time at Caucasian faces



Study 1.2. Chinese Infants' Face Race Preference

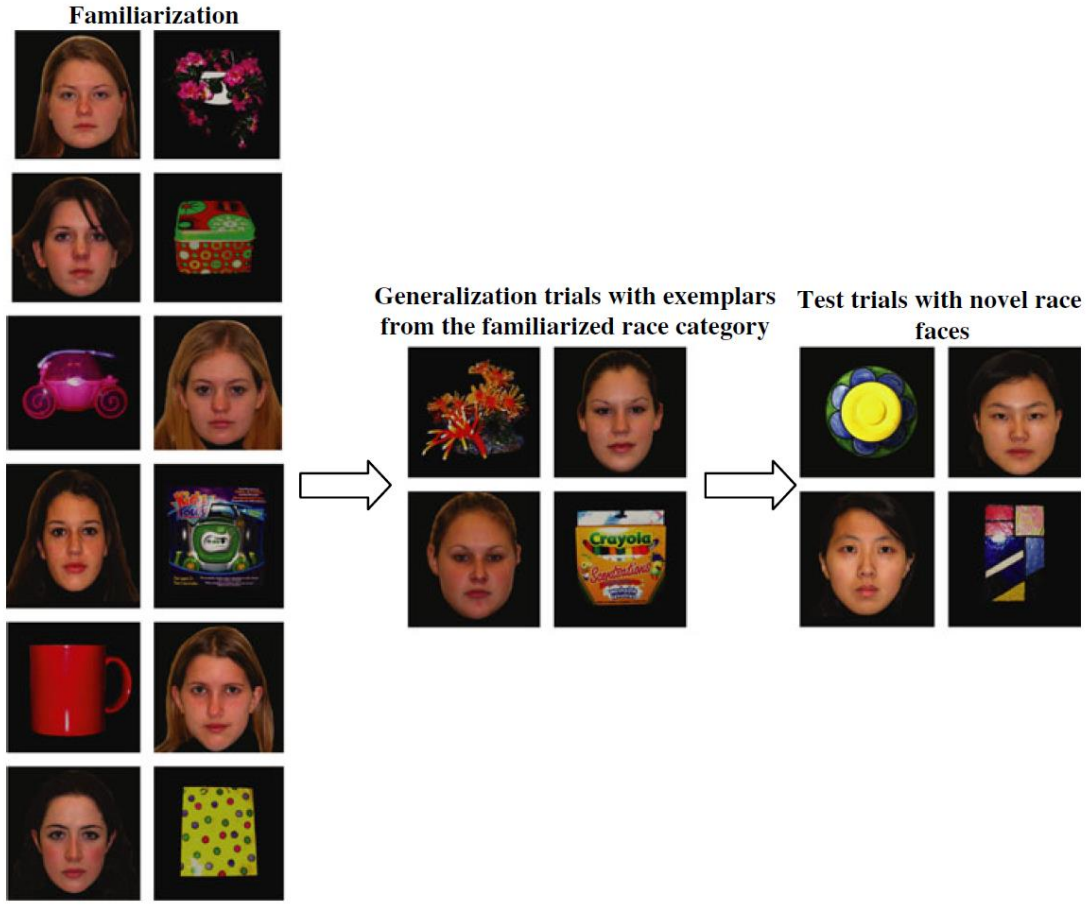
- Question: Do Chinese infants show spontaneous own-race face preference?
- Participants
  - 48 Chinese 3-month-olds
- Procedure
  - Two 10s trials
    - A male Asian face vs. A male other race face
    - A female Asian face vs. A female other race face
    - Conditions
      - Asian vs. Caucasian Condition (N = 16)
      - Asian vs. Middle Eastern Condition (N = 16)
      - Asian vs. African Condition (N = 16)

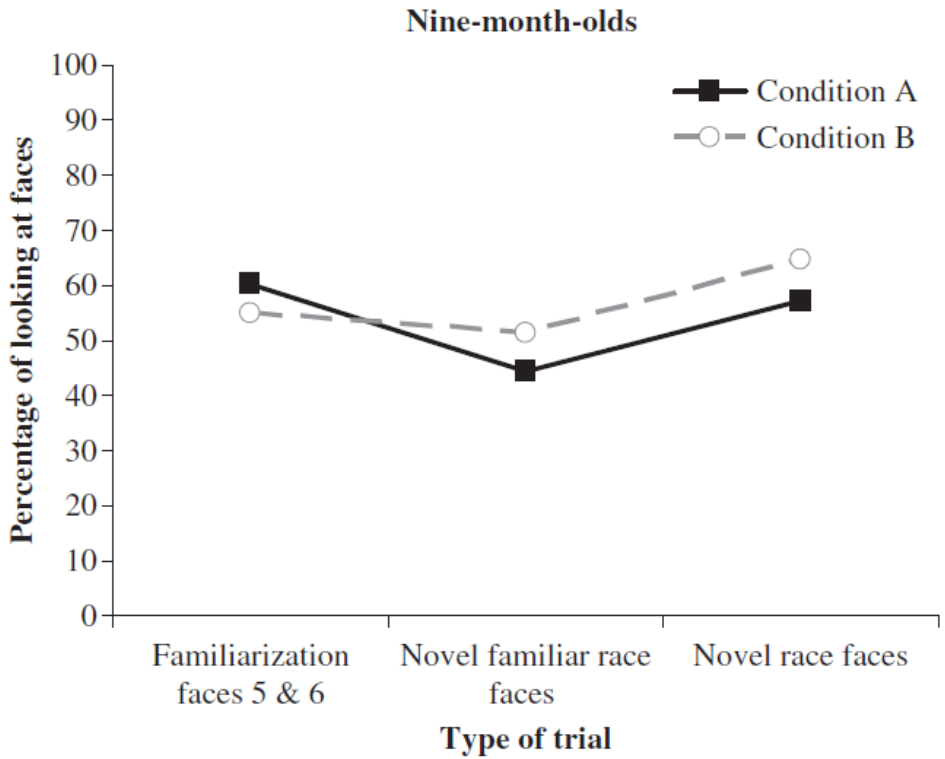


Kelly et al. (2007). Infancy.

Race Categorization

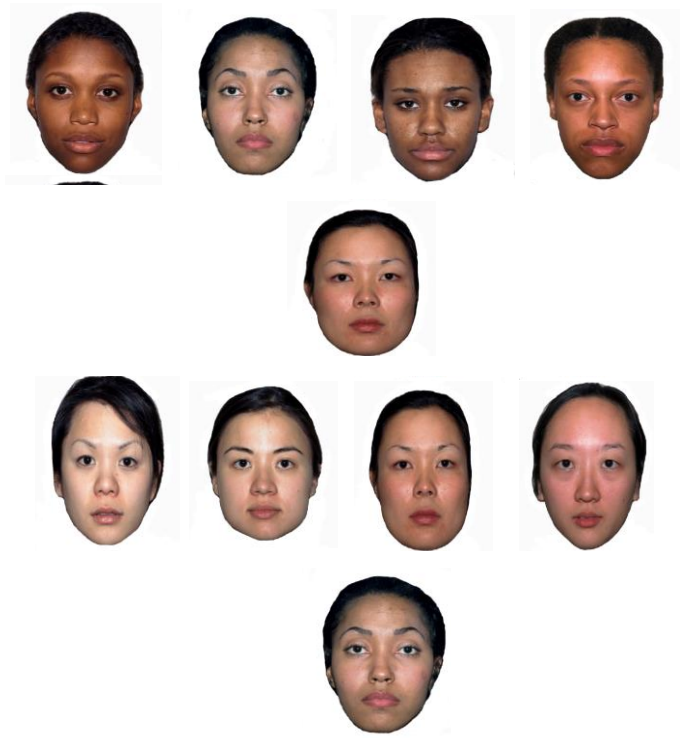
Study 2.1. face race categorization

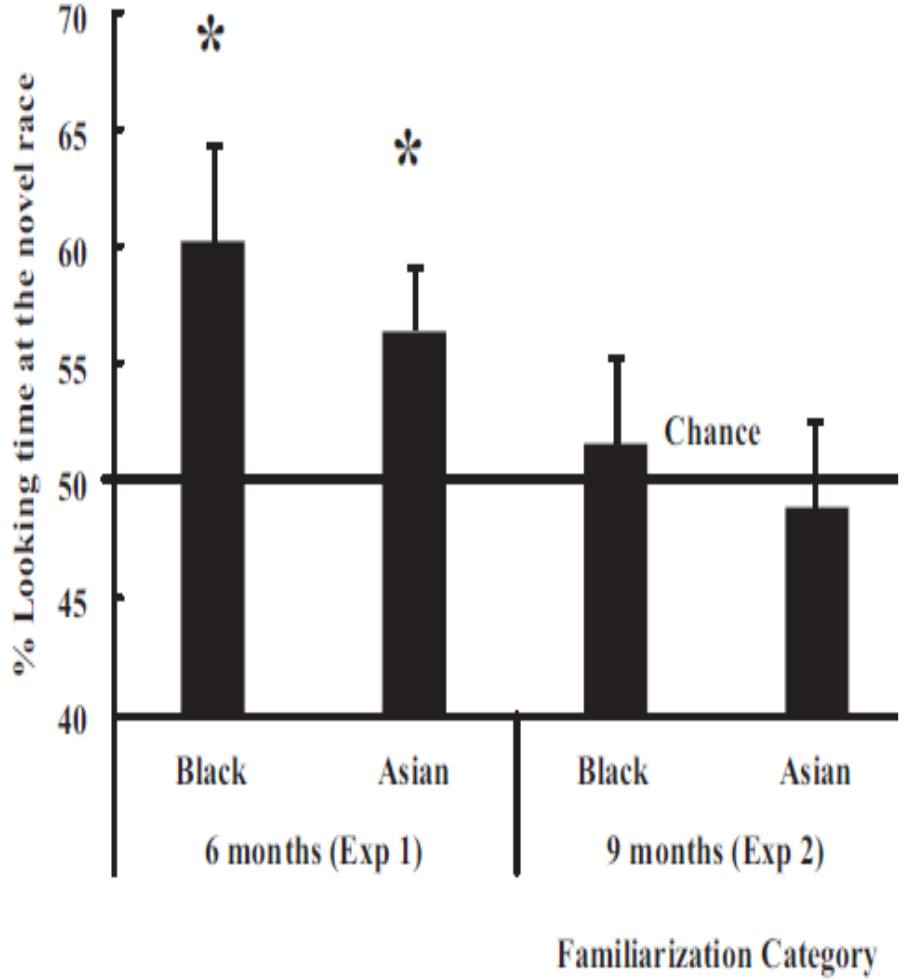




(Anzures et al., 2009). *Developmental Science*.

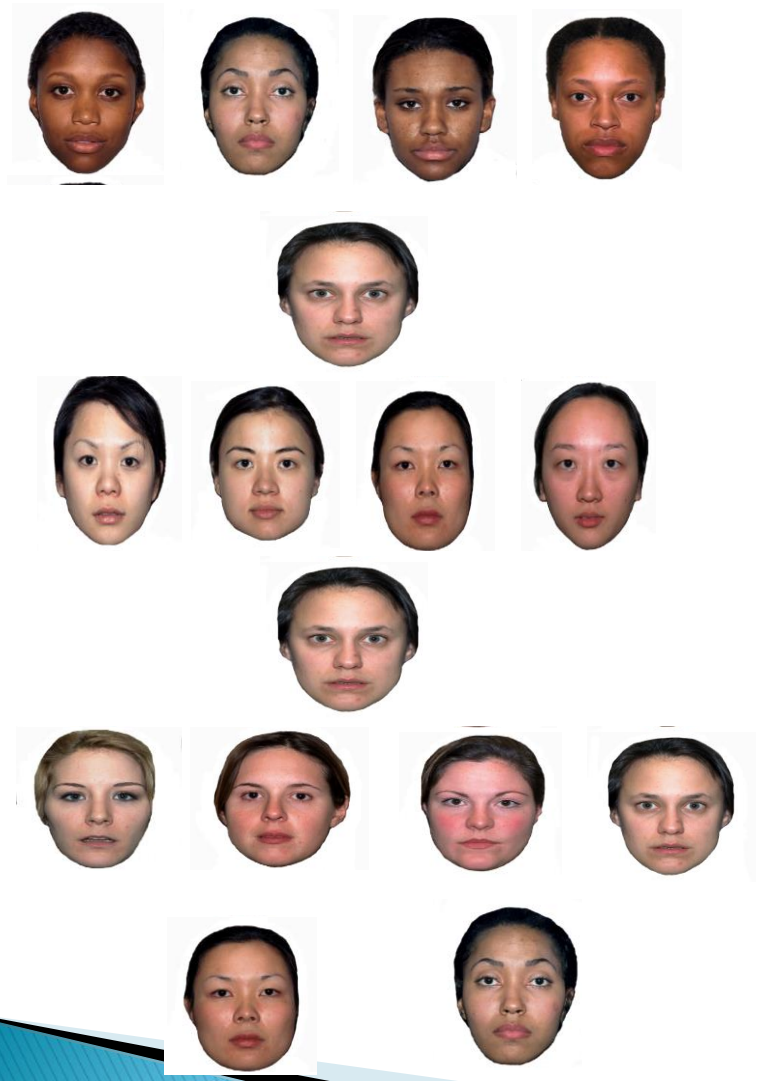
Study 2.1. face race categorization

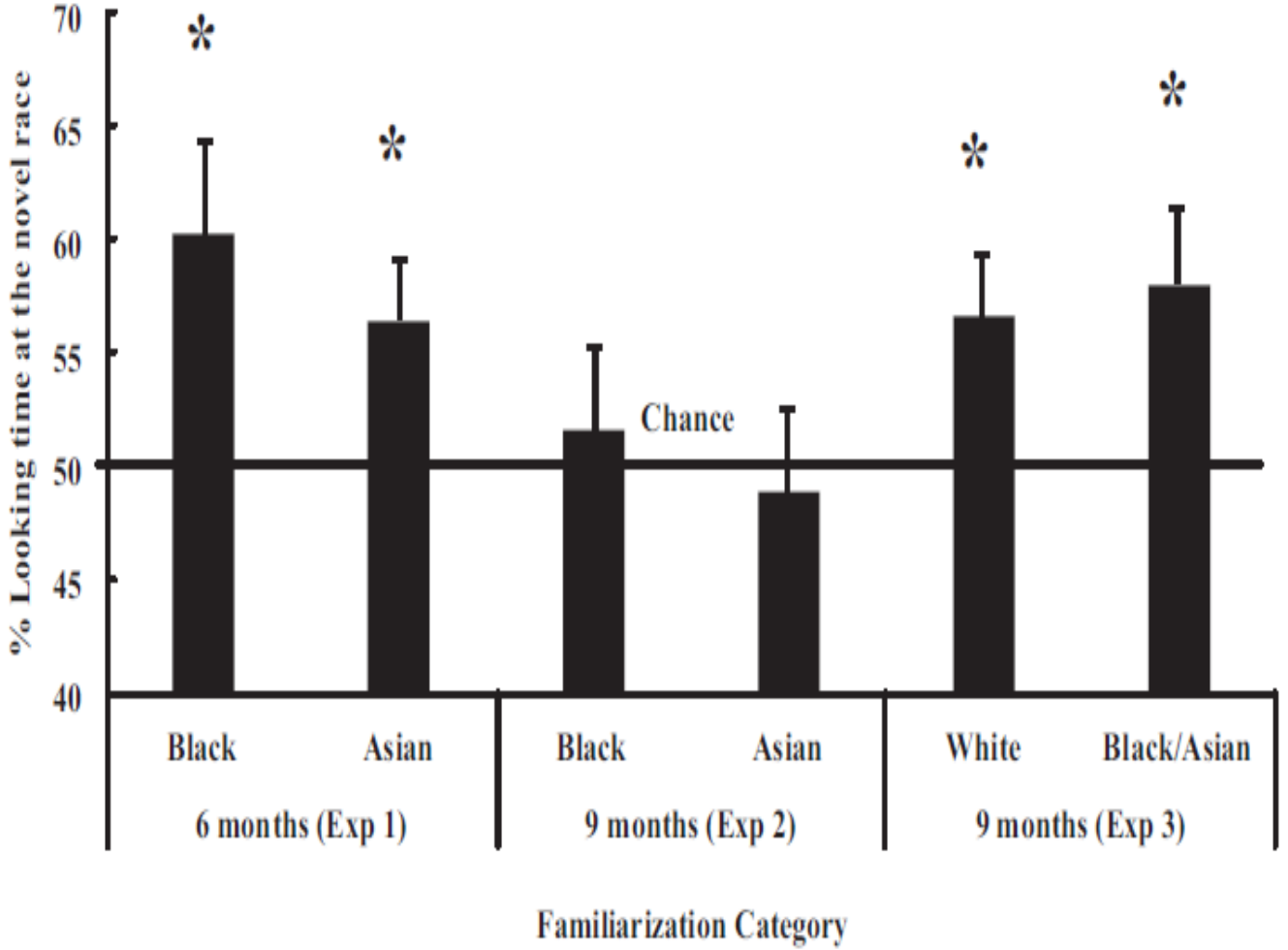




(Quinn et al., 2015). *Developmental Science*.

Study 2.1. face race categorization





(Quinn et al., 2015). *Developmental Science*.

Racial biases

Study 3.1. Implicit racial bias in infancy

- *Do own- vs. other-race faces sustain infants' attention differently when paired with positive or negative emotional valence?*
  - Participants: Chinese infants (3 to 9 months)

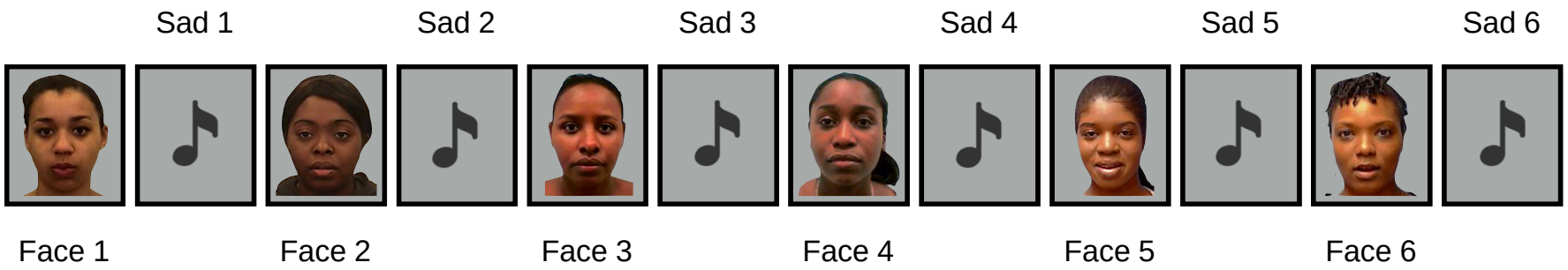
Xiao et al. (2017). *Developmental Science*.

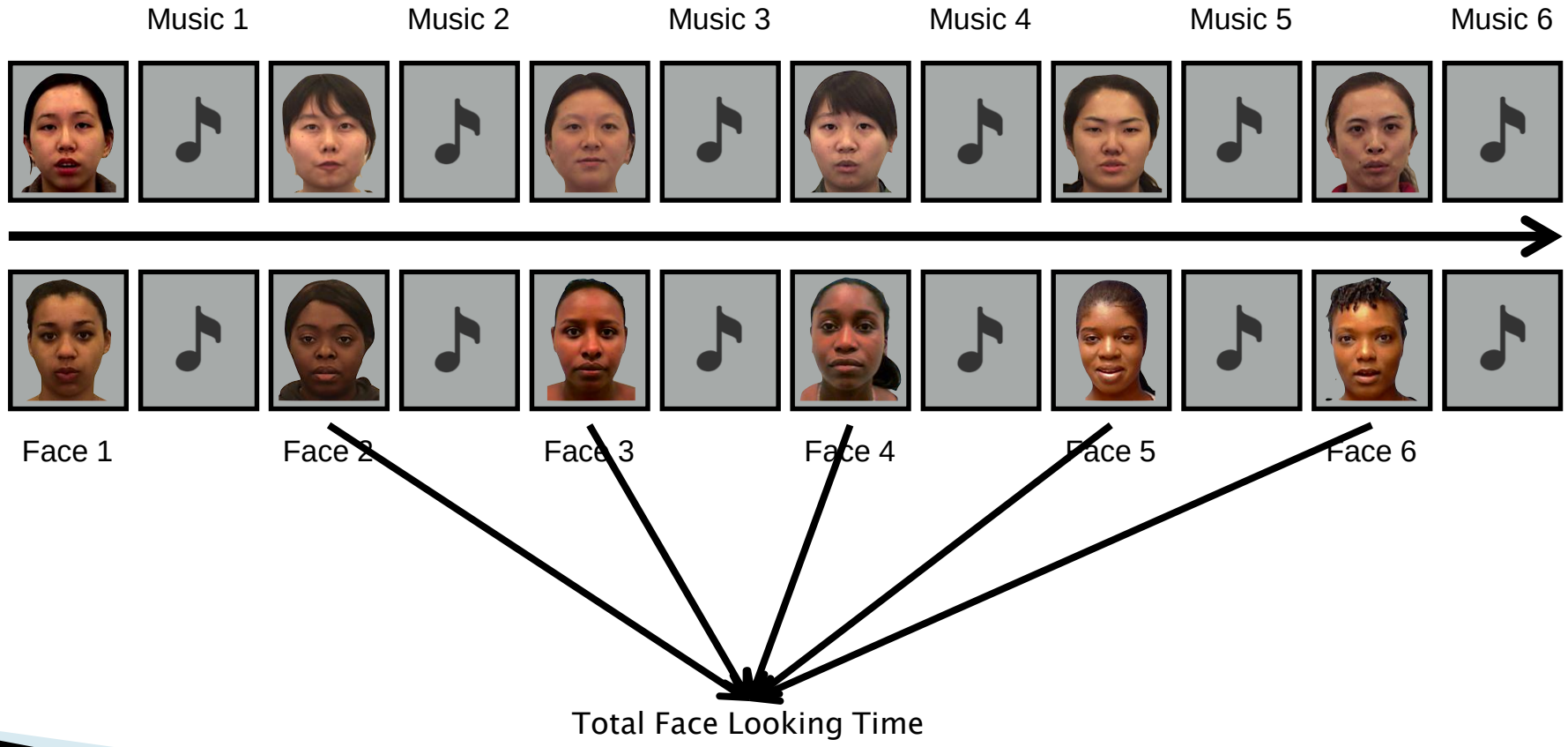
Own-race + Happy Music

Own-race + Sad Music

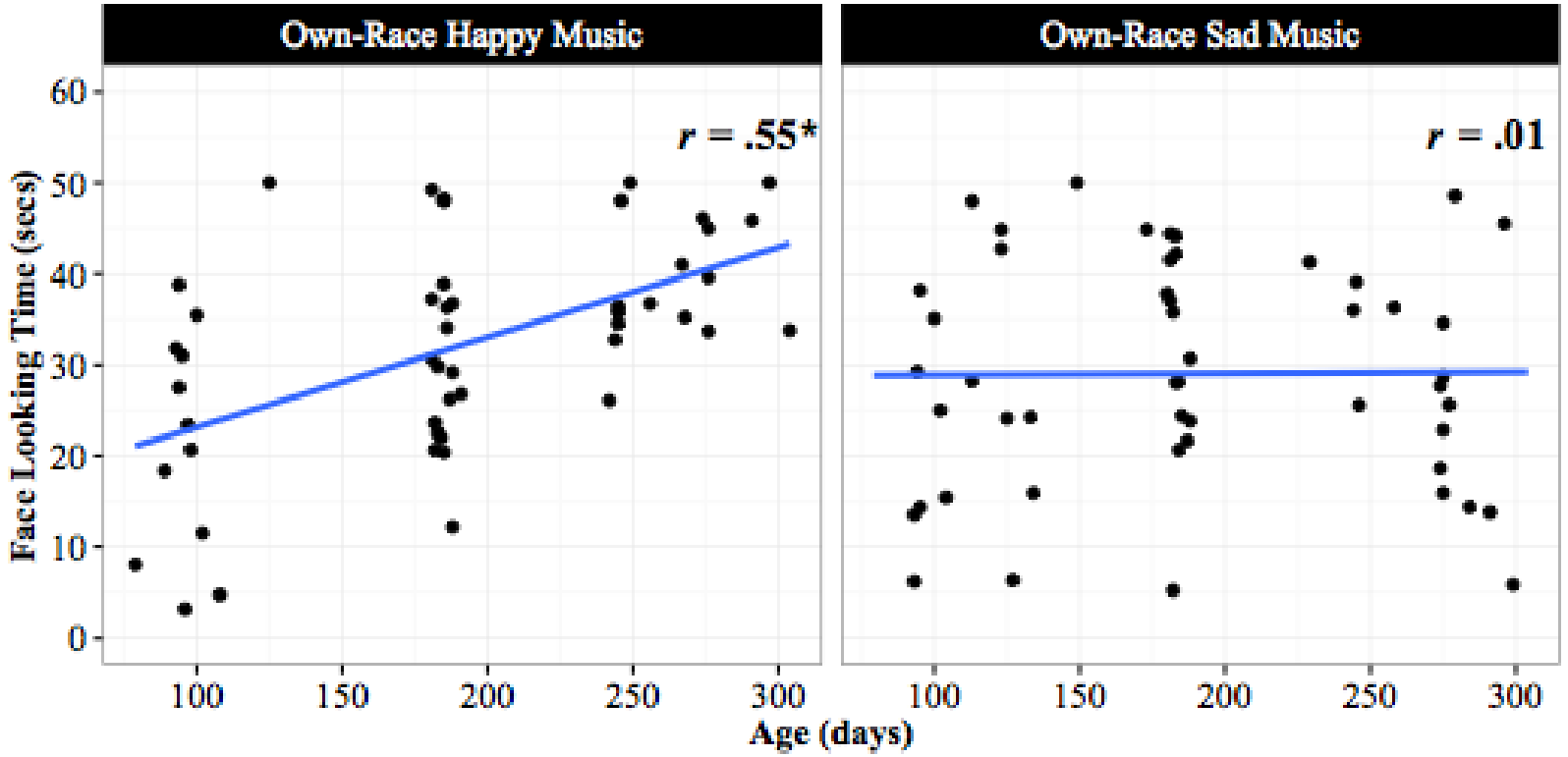
Other-race + Happy Music

Other-race + Sad Music

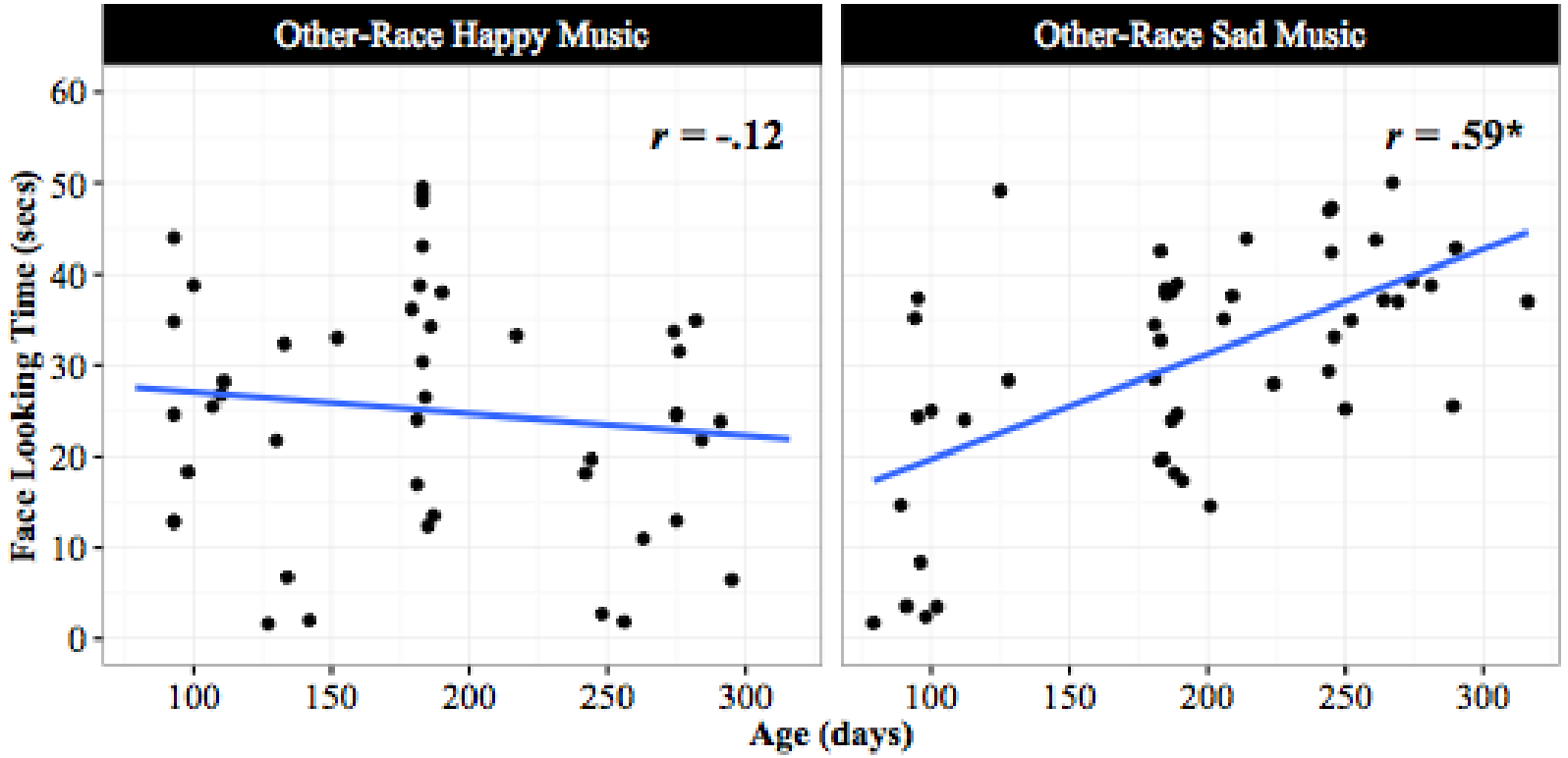



Music 1
Music 2
Music 3
Music 4
Music 5
Music 6
Face 1
Face 2
Face 3
Face 4
Face 5
Face 6
Total Face Looking Time

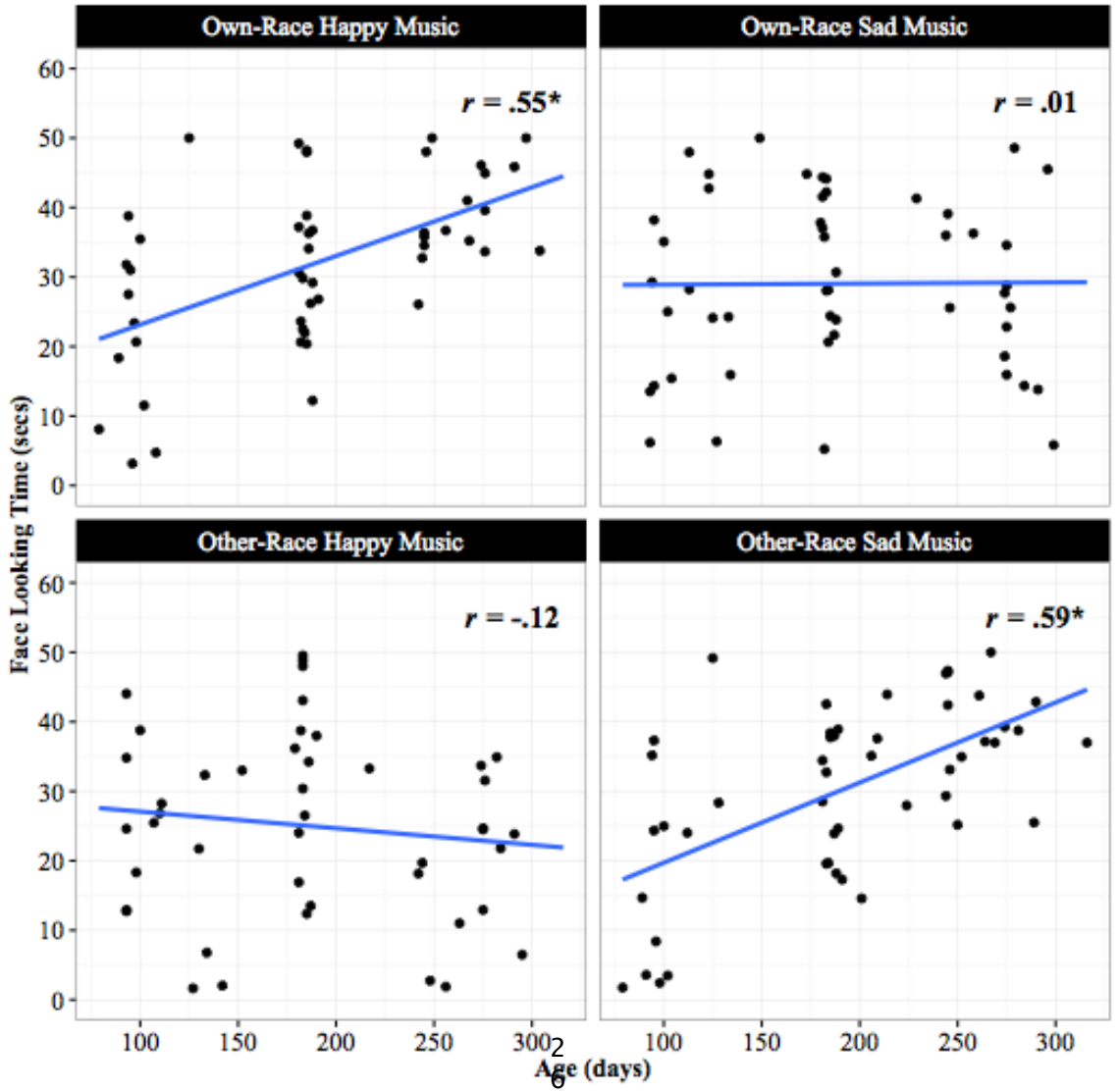
Own-race Faces



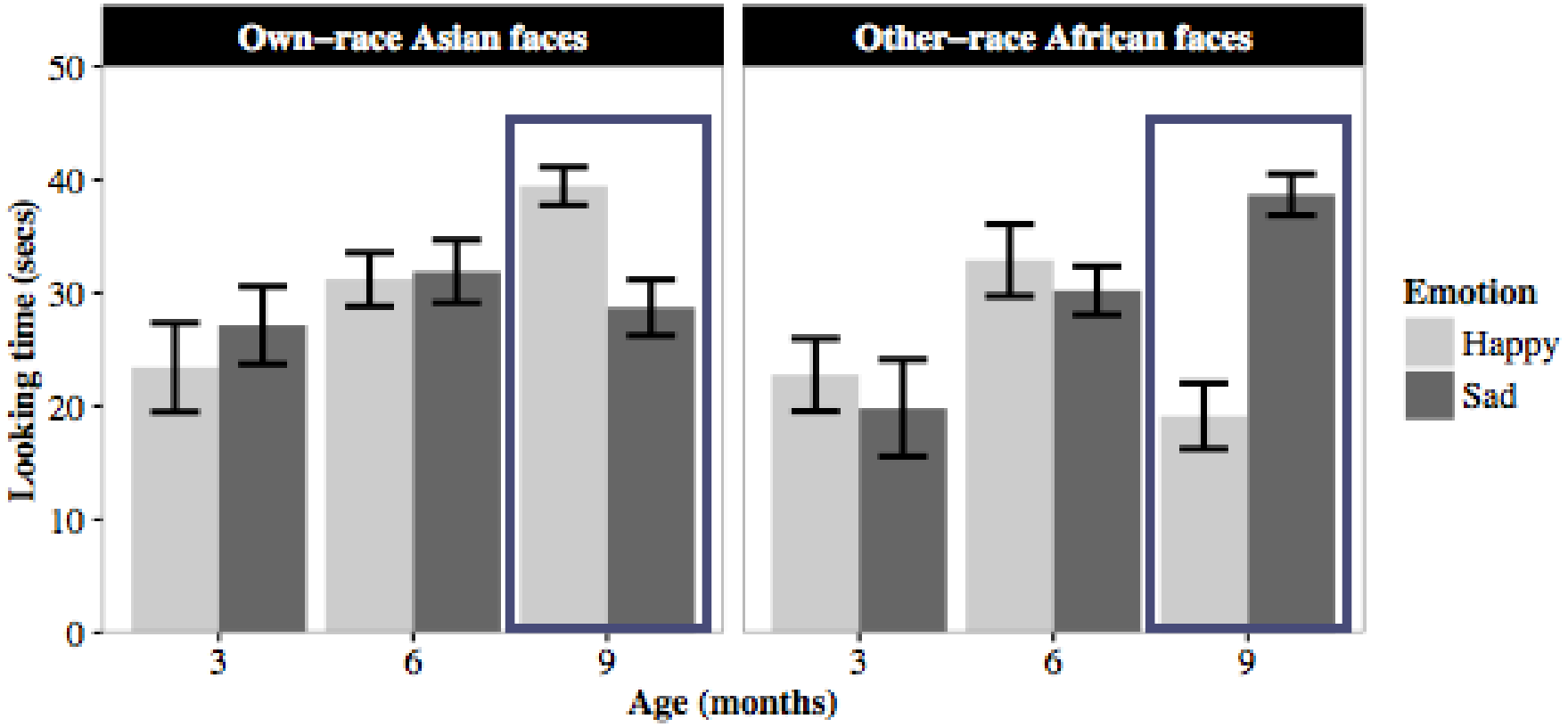
Other-race Faces



Face Looking Time



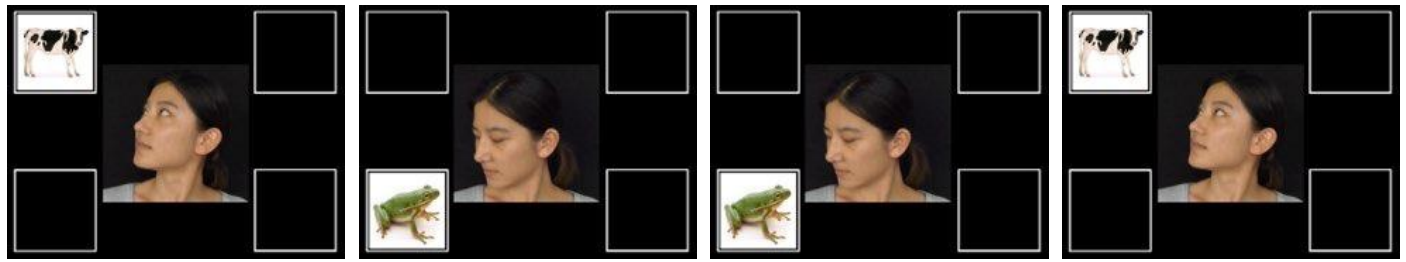
Face Looking Time (by age group)



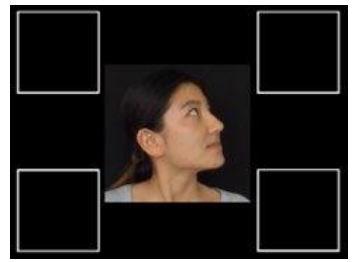
Study 3.2. Implicit racial bias in infancy

- *Do infants follow the social cues from own- vs. other-race faces differently ?*
  - Participants: Chinese infants (6-9 months)

Xiao et al. (2017). *Child Development*.

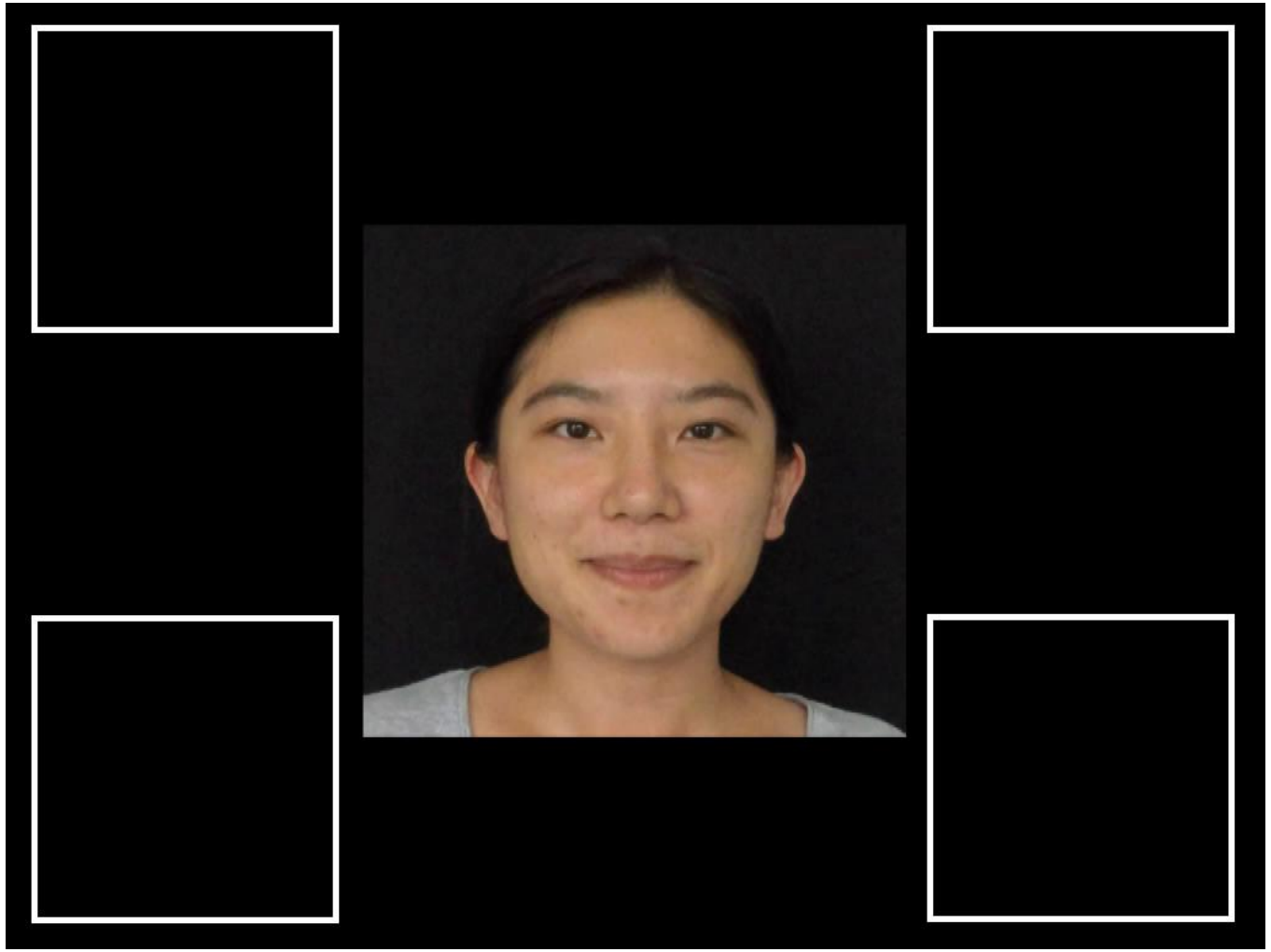


Learning Phase



Test Phase

“Hey baby, Look!”

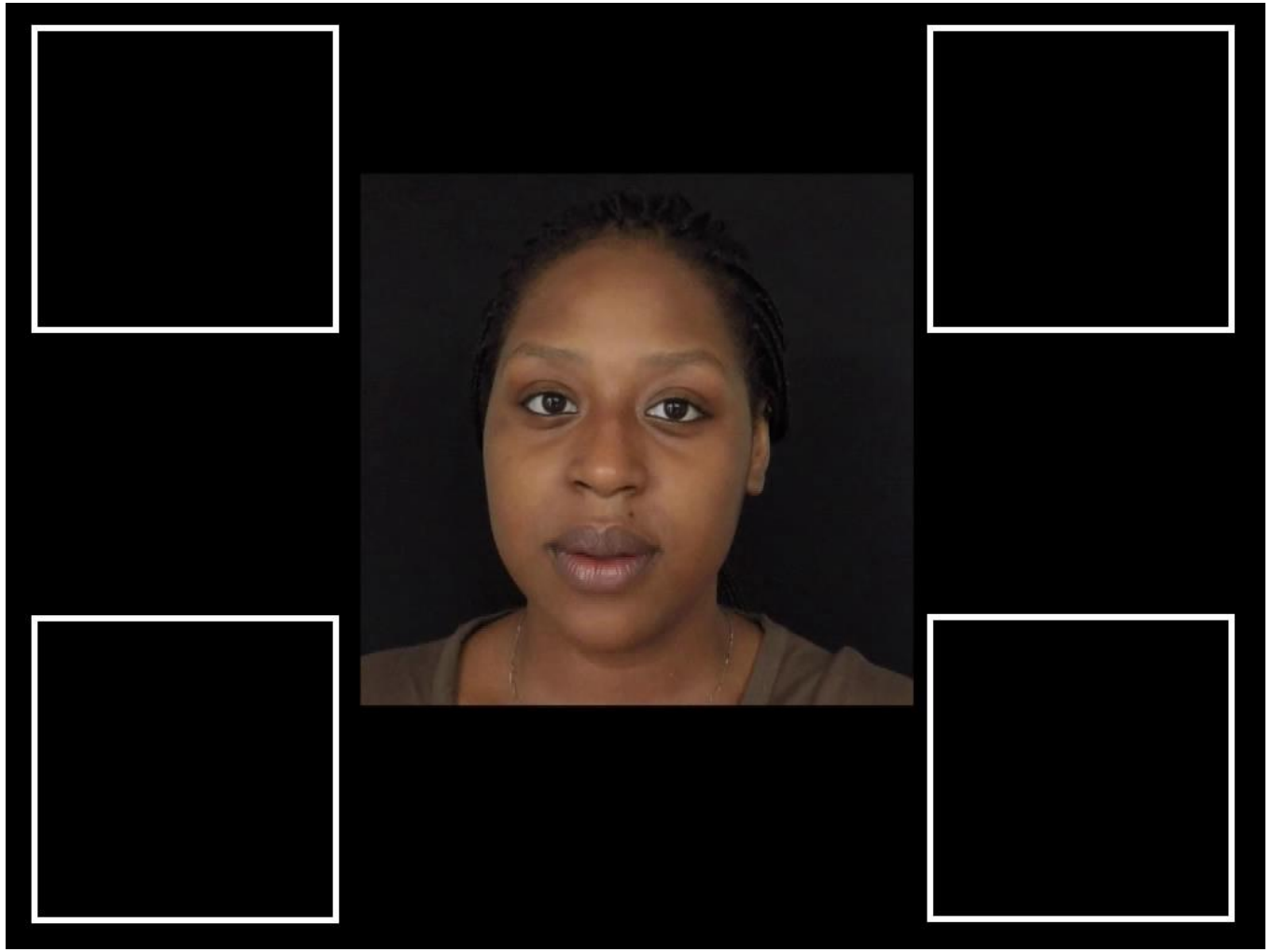


Own-race Condition

Own-race Condition

Test Phase

“Hey baby, Look!”



Other-race Condition

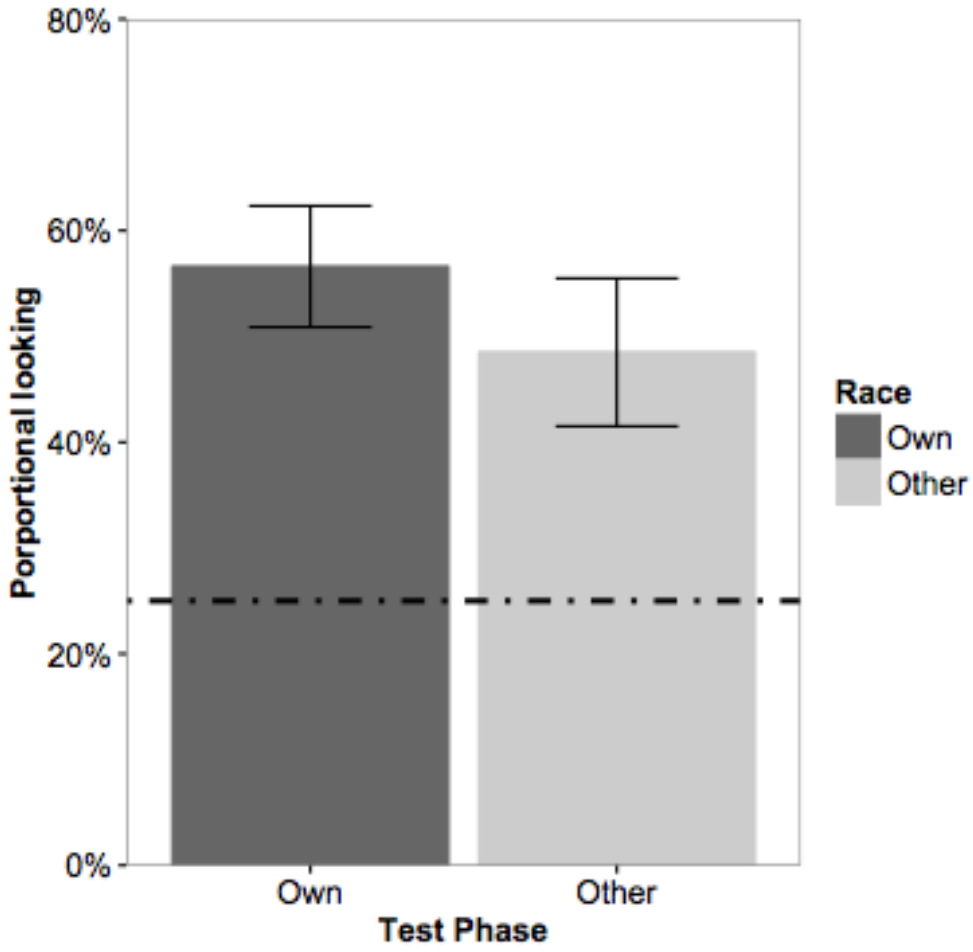
100% reliable

Own-race condition

Other-race condition

Learning Phase

Gaze Following



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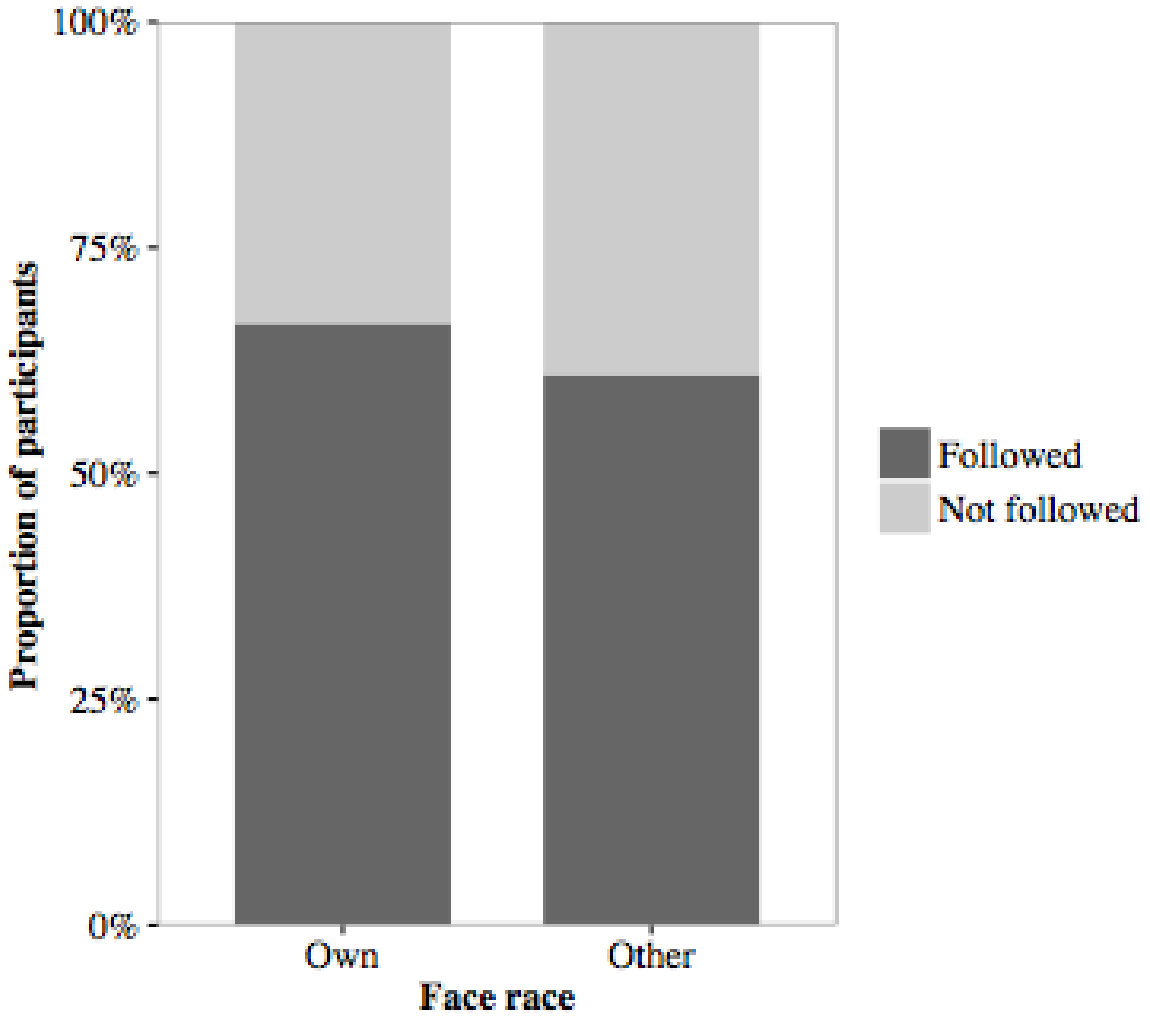
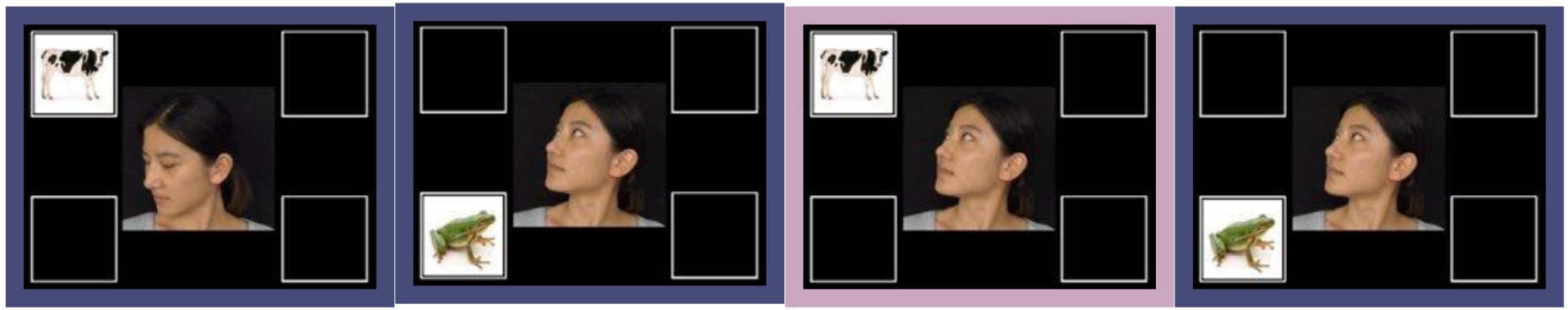


25% reliable + 75% unreliable

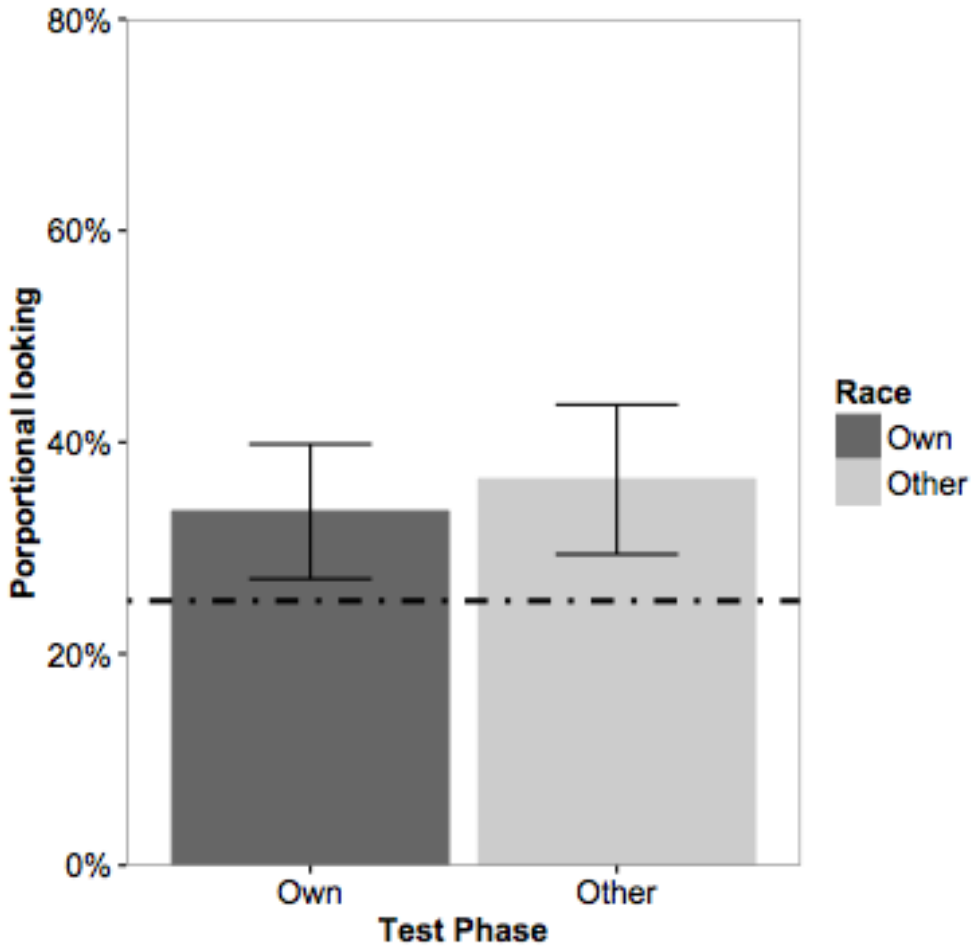
Own-race condition



Other-race condition

Learning Phase

Gaze Following



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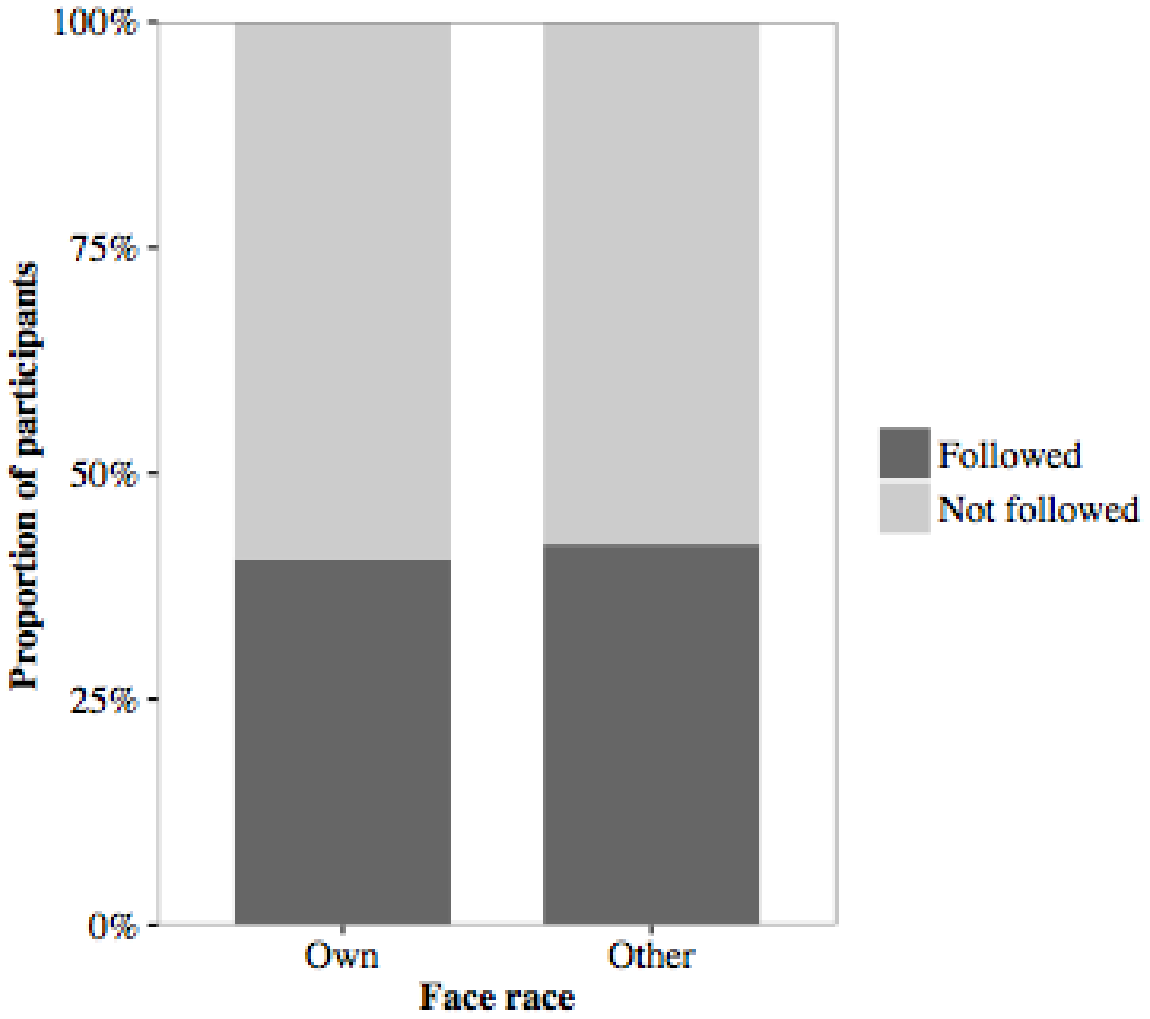
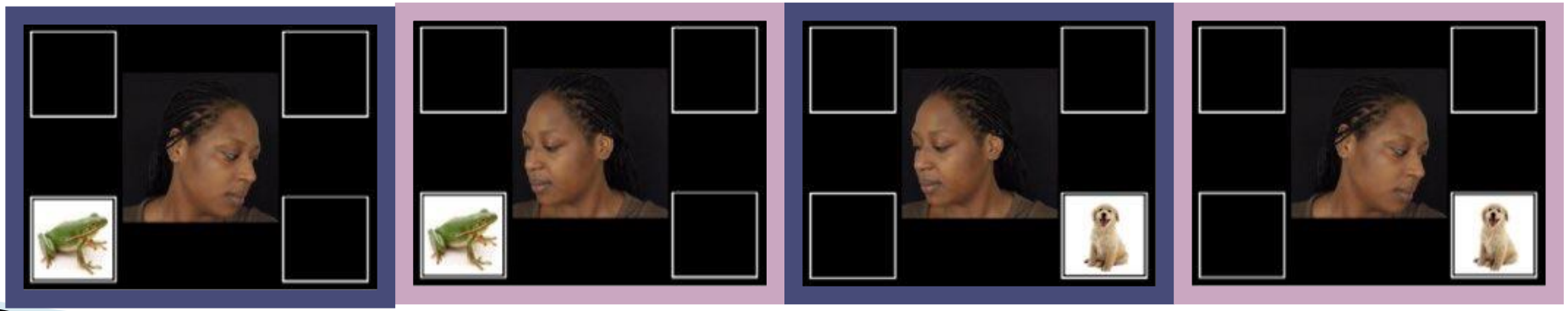


50% reliable + 50% unreliable

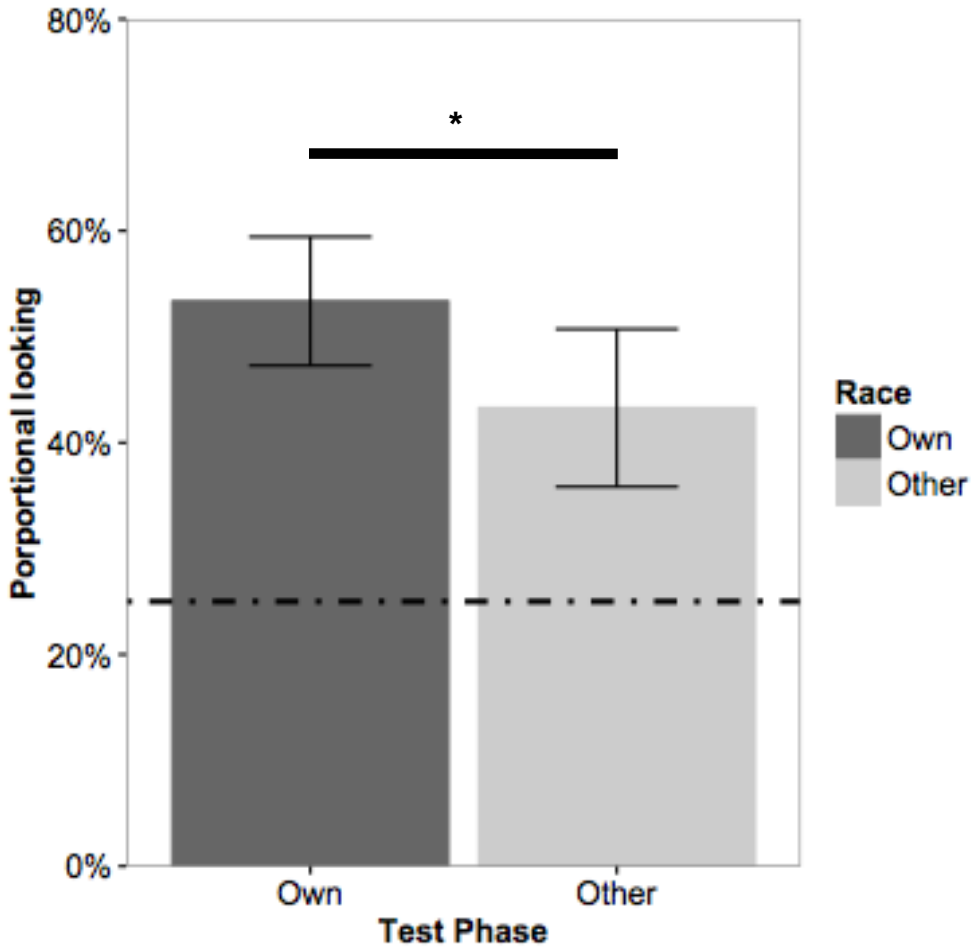
Own-race condition

Other-race condition



Learning Phase

Gaze Following



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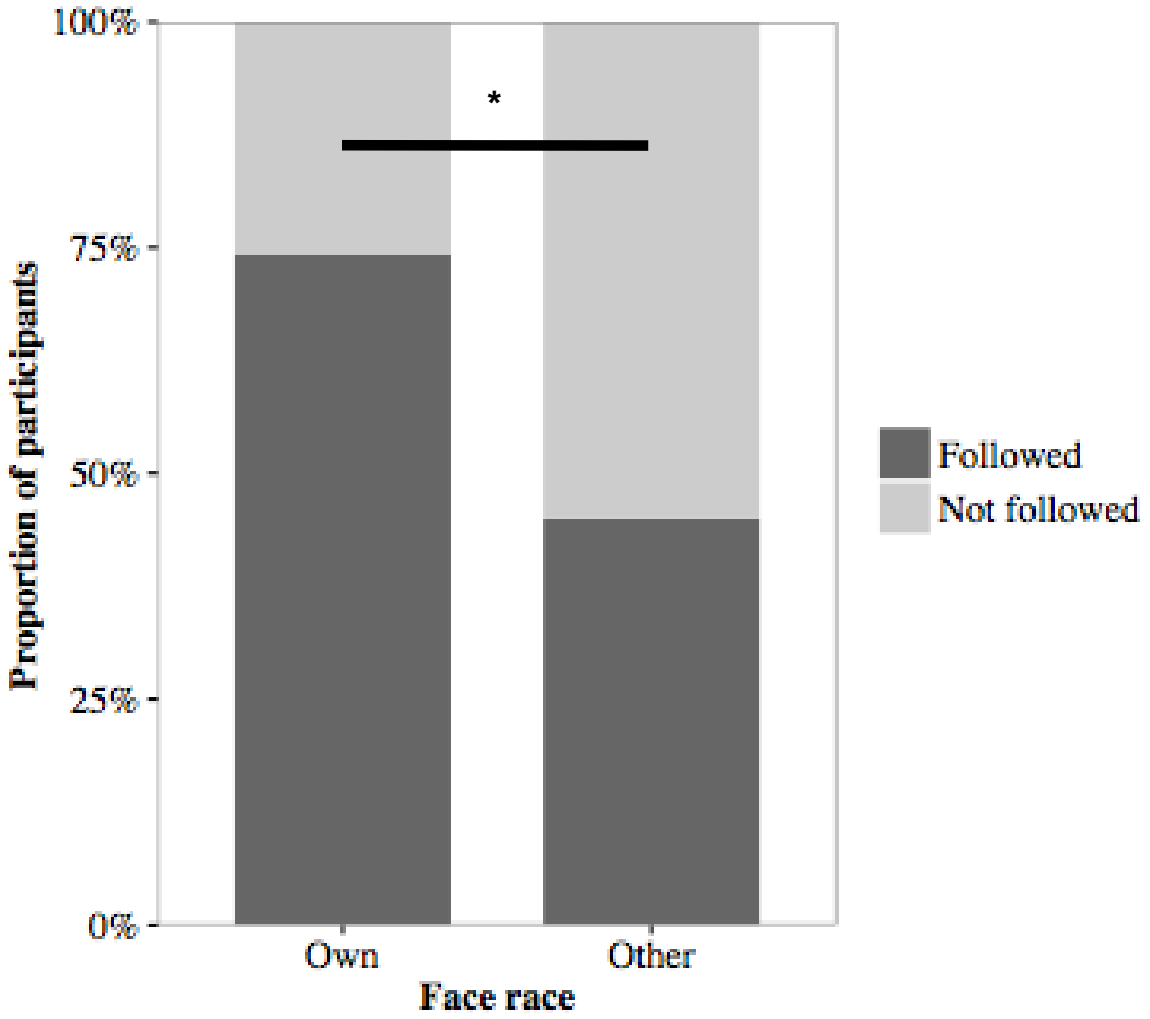
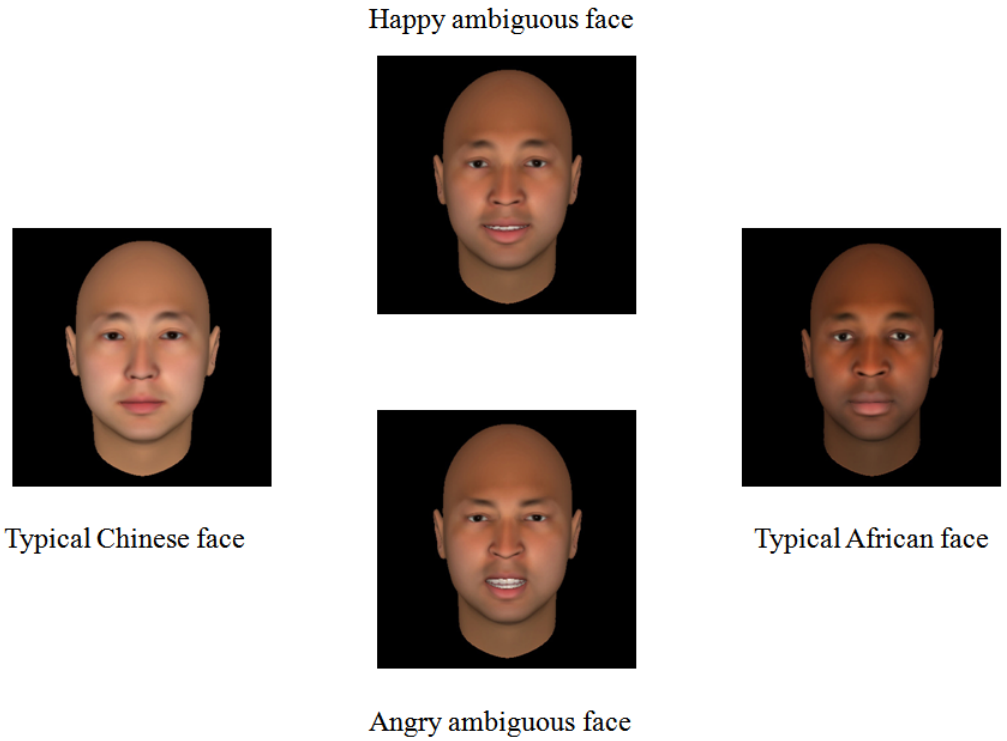


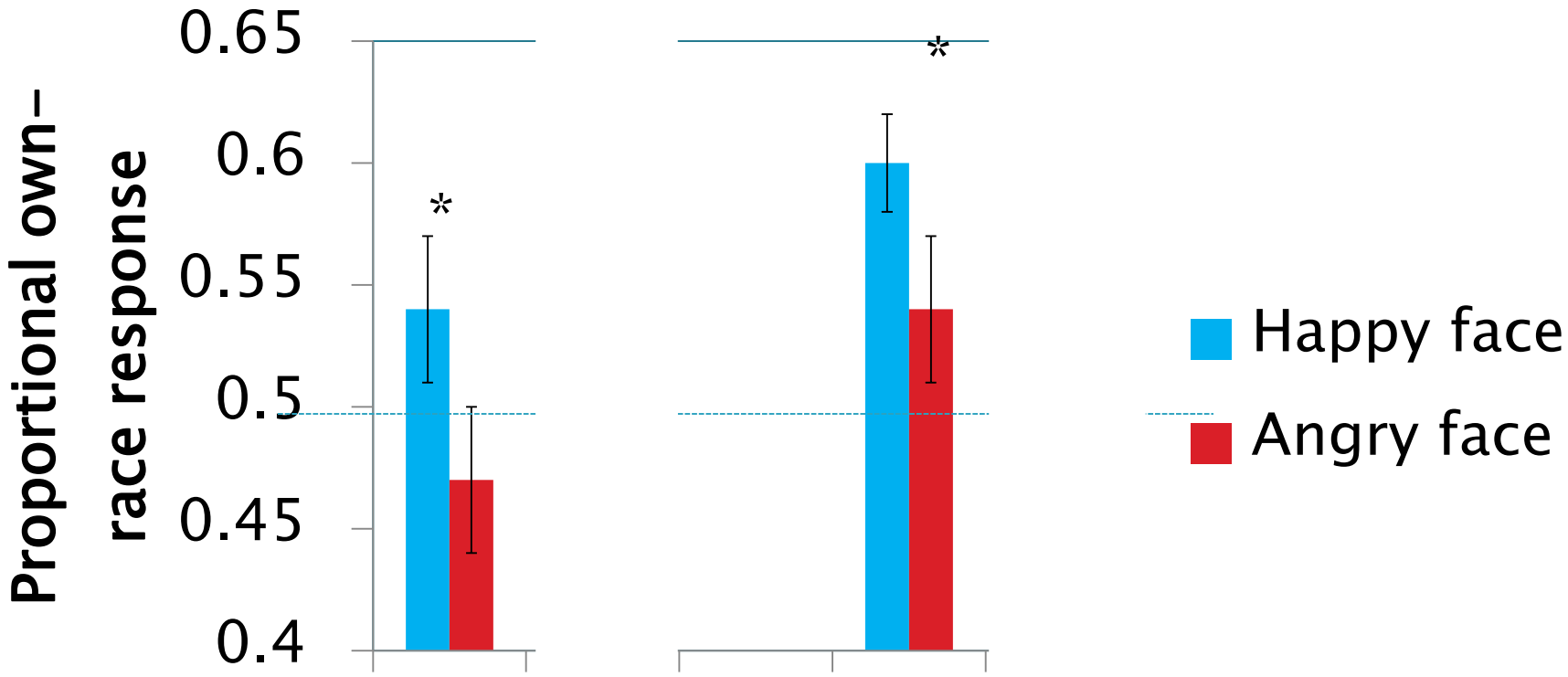
Study 3.3. The other-race = angry effect

- Participants
  - 4-6-year-old Chinese kindergarteners Method
  - The "out group=angry" paradigm:
  - If Chinese face, press A; if African face, press B



Xiao et al. (2014). *Developmental Science*.

Results (Own-race responses)



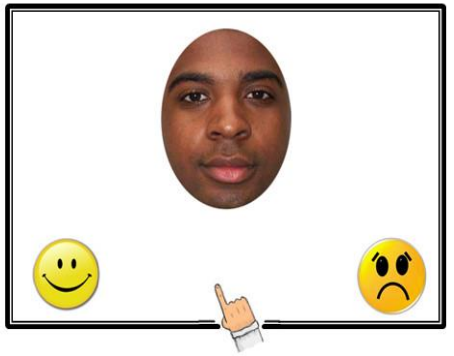
Study 3.4. Implicit & explicit & racial attitude in preschool children

- Participants
  - Chinese 3, 4, 5 preschoolers & adults
- Method
  - Modified IAT (Implicit Attitude Test) for preschool children
  - Explicit attitude test: Whom would you choose to do X?

Qian et al. (2015). *Child Development.*

Implicit racial bias measure

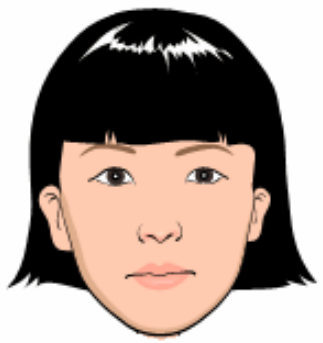
- Child Friendly IAT
  - 40 test trials
  - Congruent trials (if own-race face, press happy & if other-race face, press sad)
  - Incongruent trials (if own-race face, press sad & if other-race face, press happy)
  - IAT D score=(RT(incong)-RT(cong))/total SD



Explicit racial bias measure

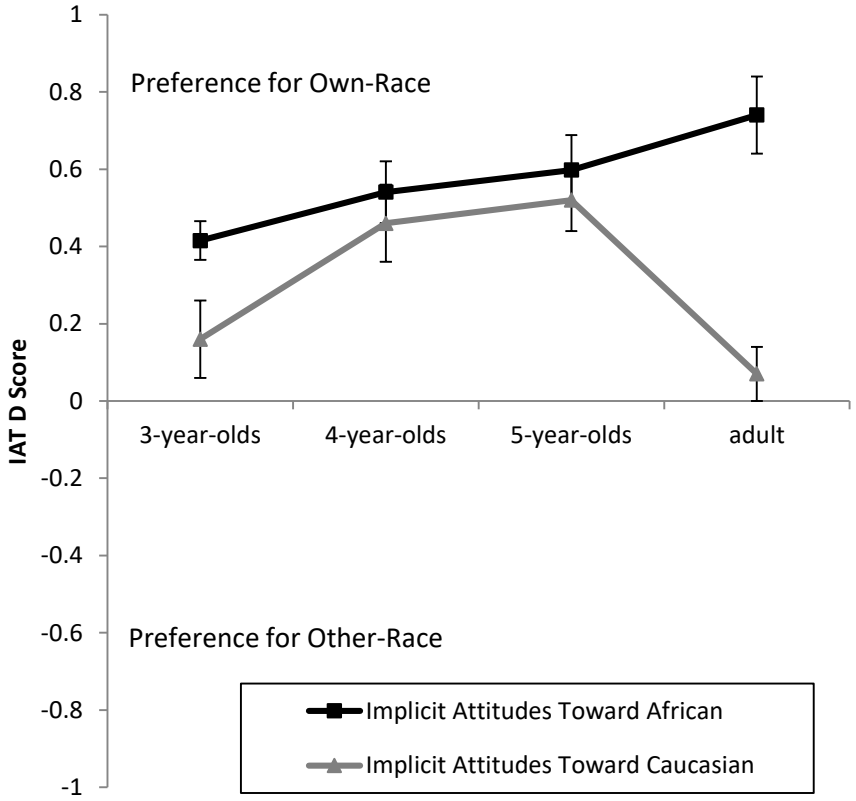
Children heard a series of stories and were asked to select between a Chinese adult and an African or Caucasian adult

e.g. *This summer, your mother will take you to a swimming class. In the class, you could choose one person to teach you how to swim. Whom would you choose?*

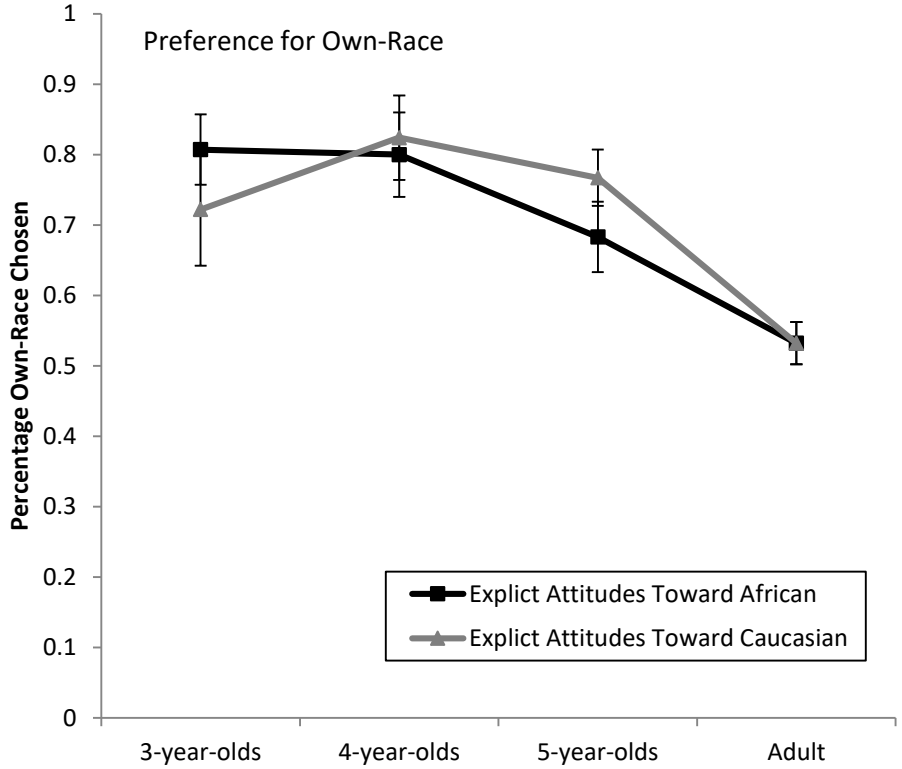


Implicit/explicit racial attitudes in Chinese preschool children

Implicit racial bias

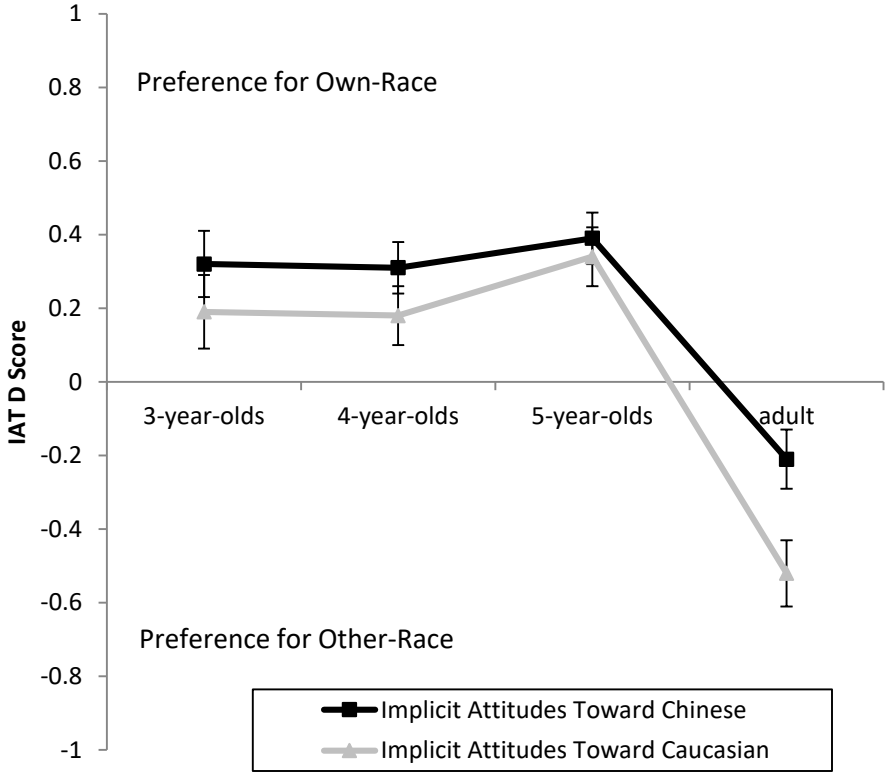


Explicit racial bias

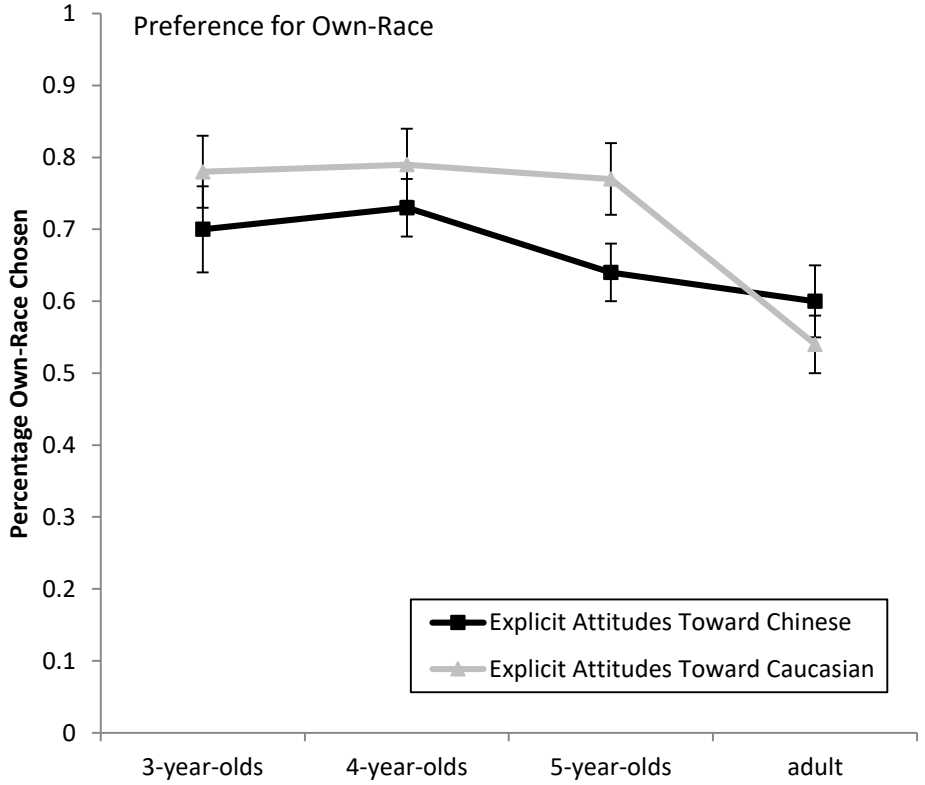


Implicit/explicit racial attitudes in Cameroon preschool children

Implicit racial bias



Explicit racial bias

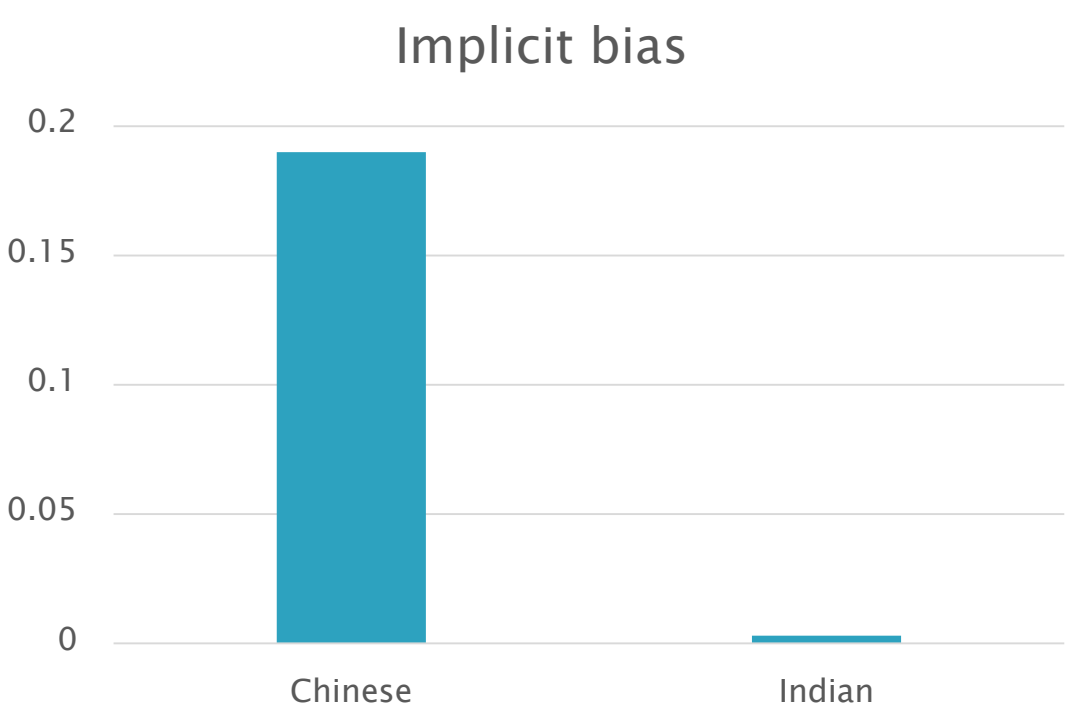


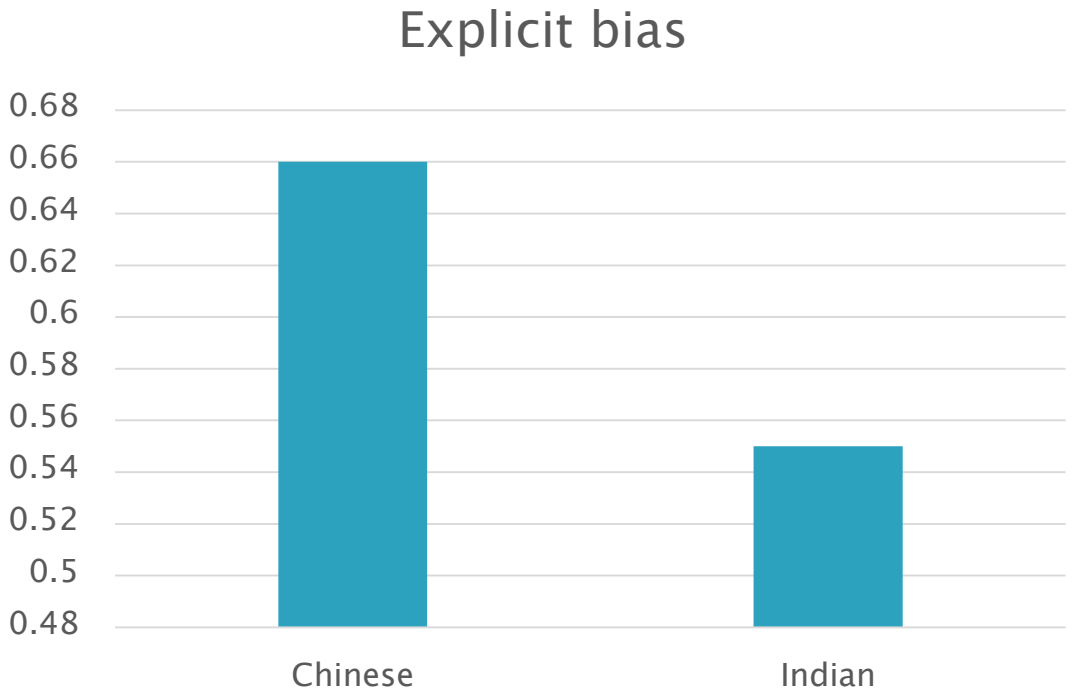
Study 3.5. Implicit & explicit & racial attitude in Singaporean preschool children

- Participants
  - Singaporean 3-6 preschoolers
    - Majority (Chinese) vs. Minority (Minority)
- Method
  - Modified IAT (Implicit Attitude Test) for preschool children
  - Explicit attitude test: Whom would you choose to do X?

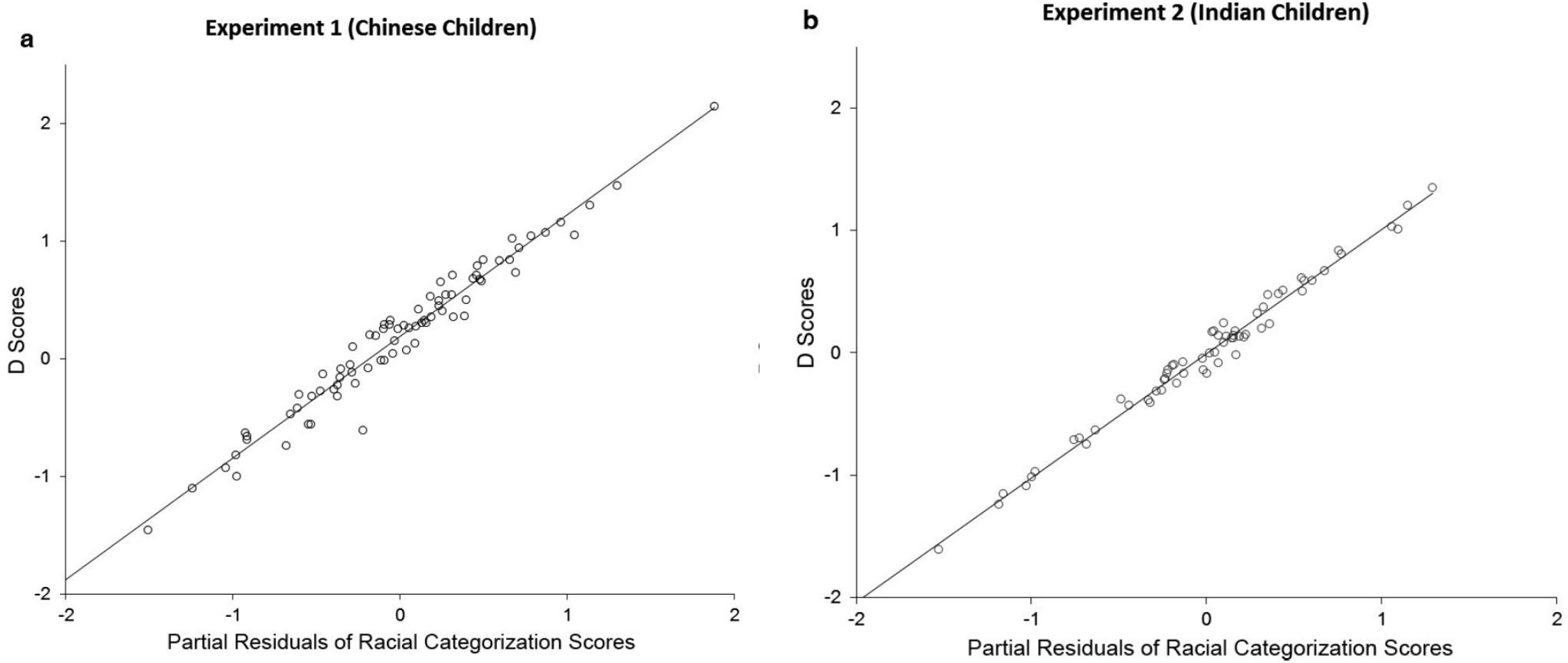
Setoh et al. (2017). *Child Development.*

Singaporean preschoolers' biases





Race categorization and implicit racial bias

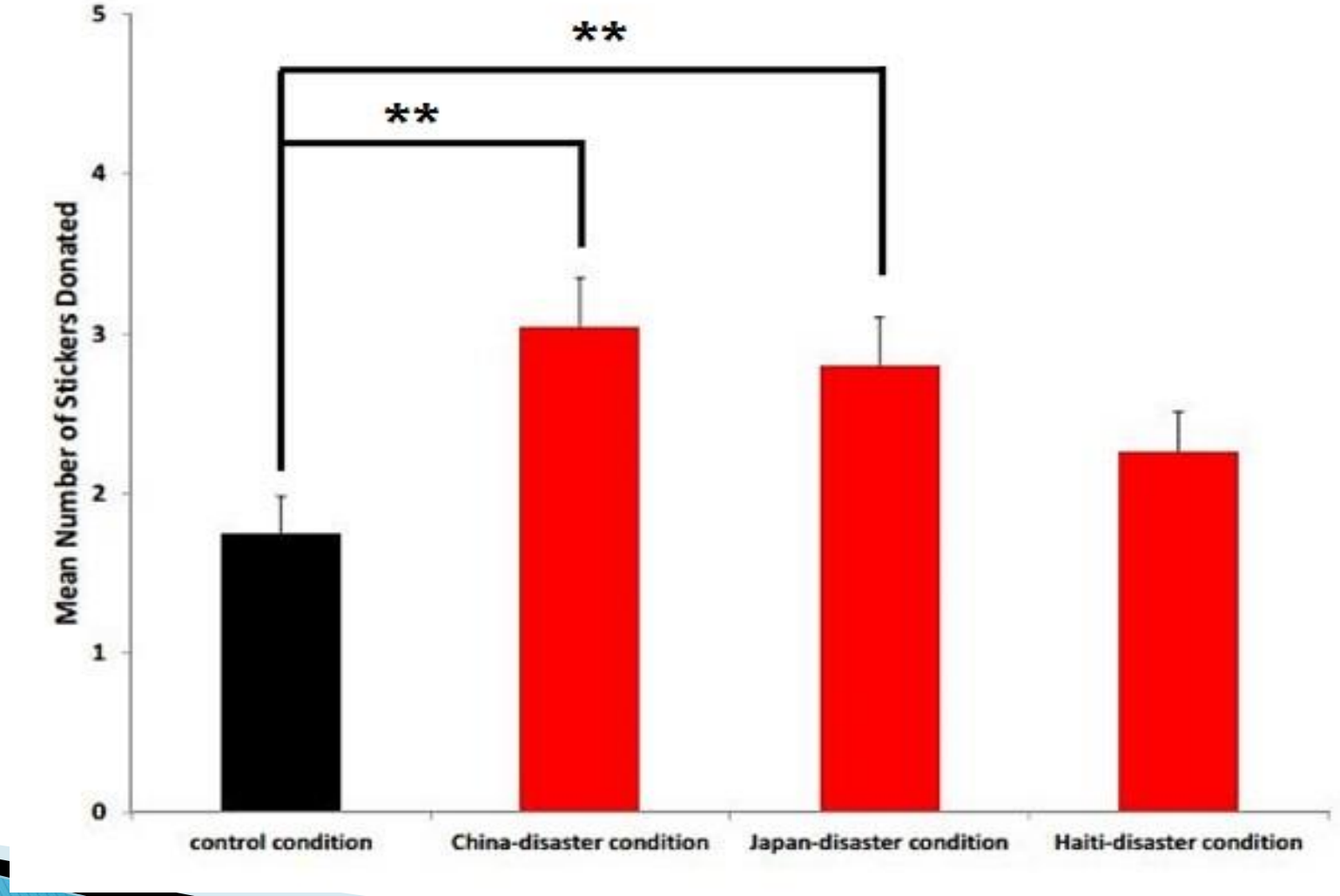


Study 3.6. Racial bias in altruistic giving

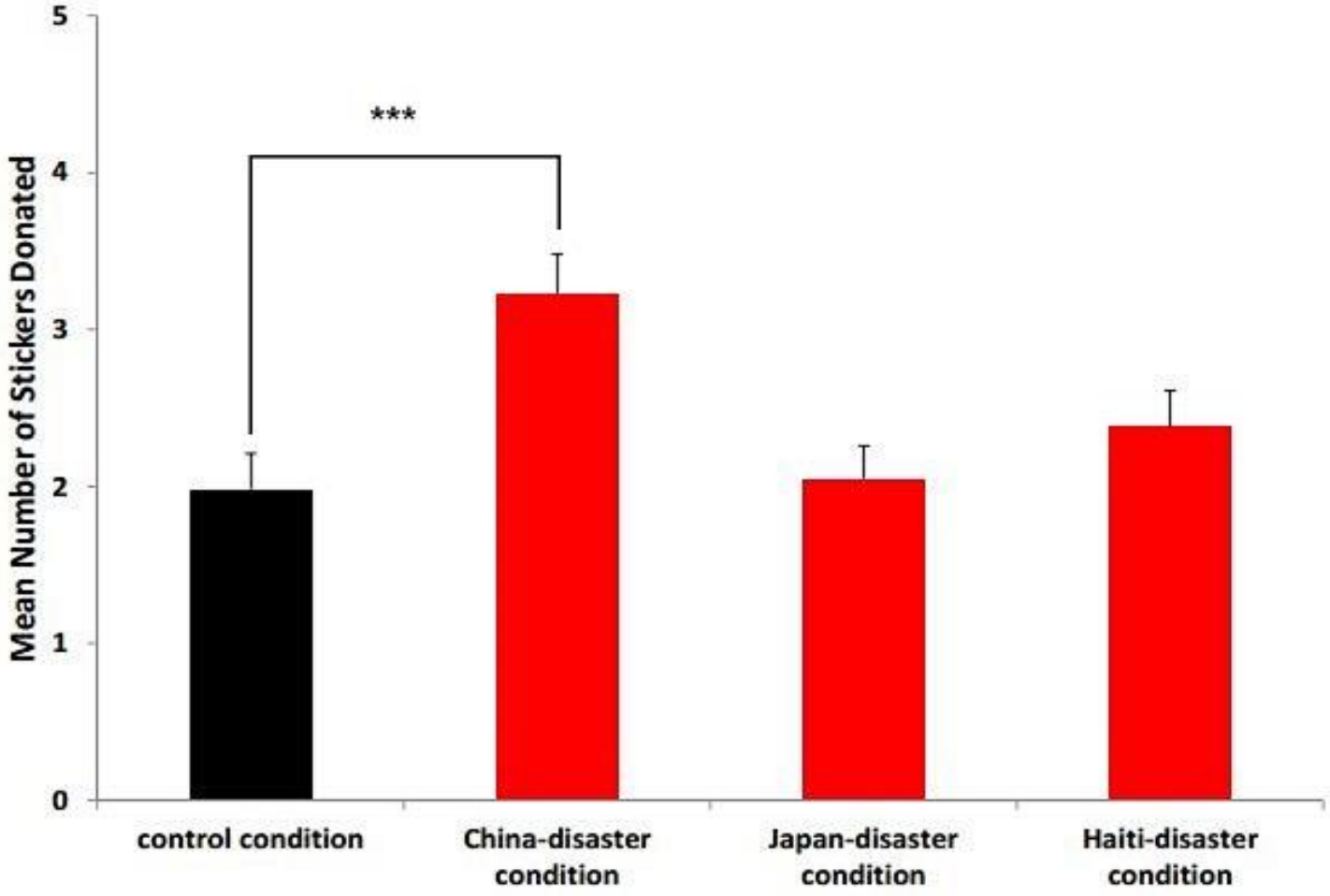
- Participants
  - Chinese 9-year-olds
- Method
  - Natural disaster priming (Li et al., 2013)
    - Experimental vs. control
  - Giving some own stickers to an unnamed child anonymously

Li et al. (in prep).

Altruistic giving after photo viewing



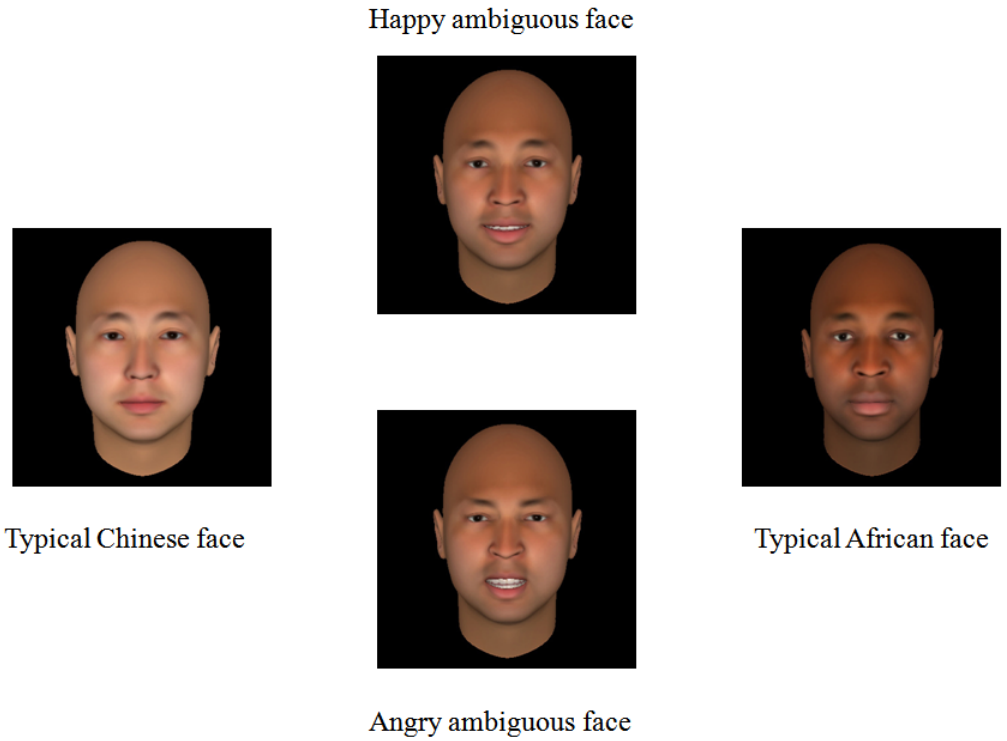
Altruistic giving after photo viewing and labeling



Racial bias reduction

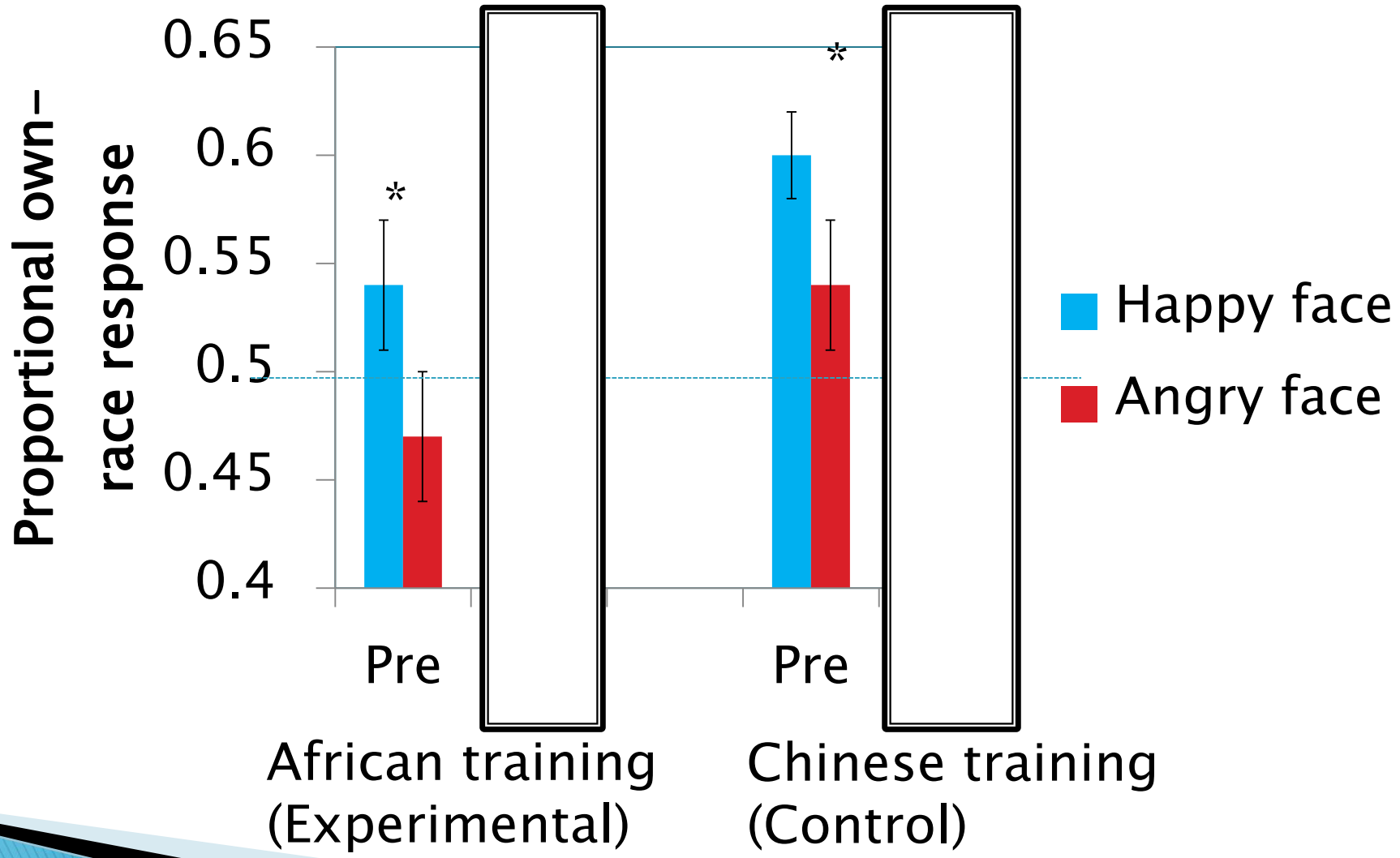
Study 4.1. Reducing Implicit racial attitude in children: Immediate effects

- Participants
  - 4-6-year-old Chinese kindergarteners Method
  - The “out group=angry” paradigm:
  - If Chinese face, press A; if African face, press B

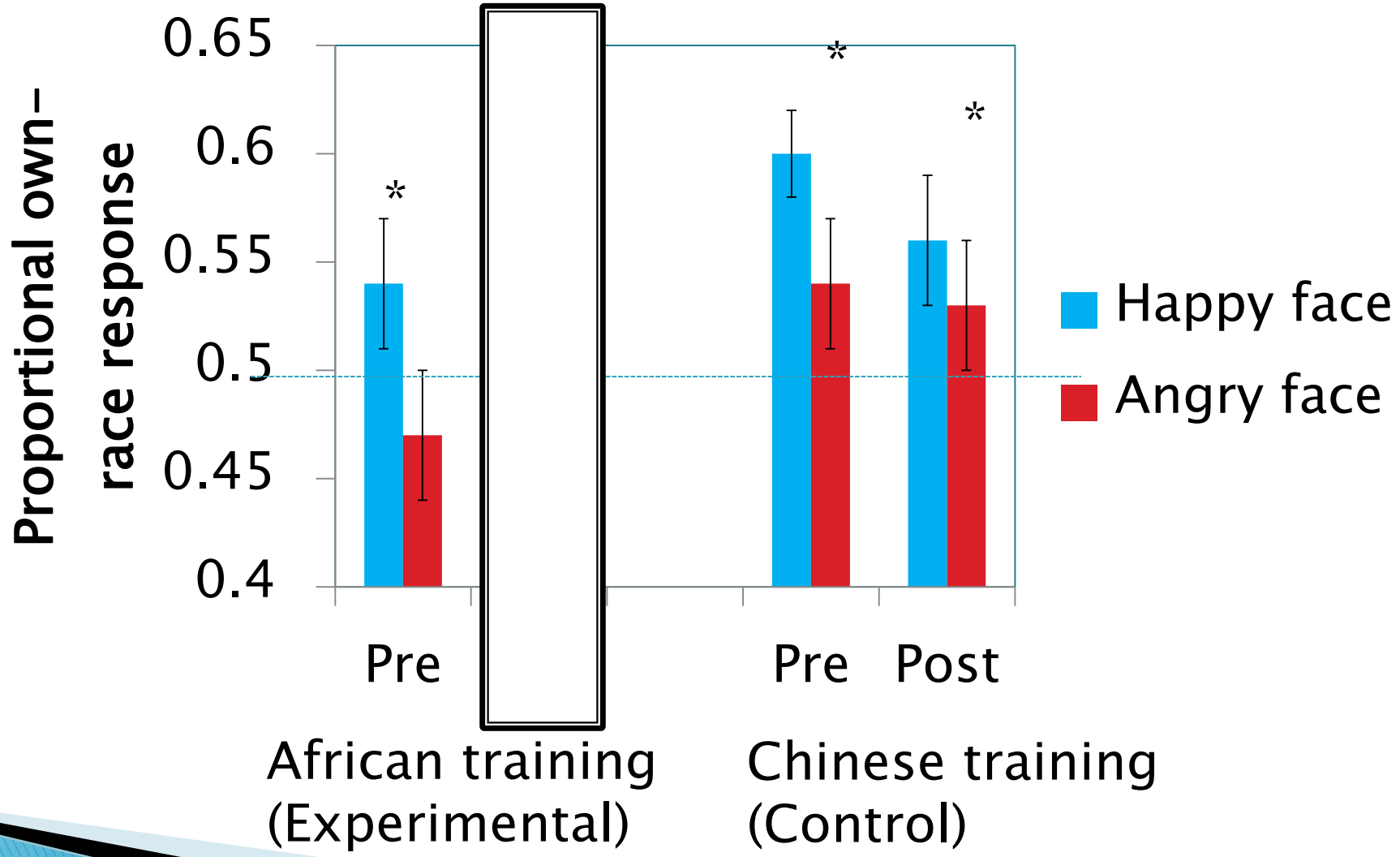


Xiao et al. (2014). *Developmental Science*.

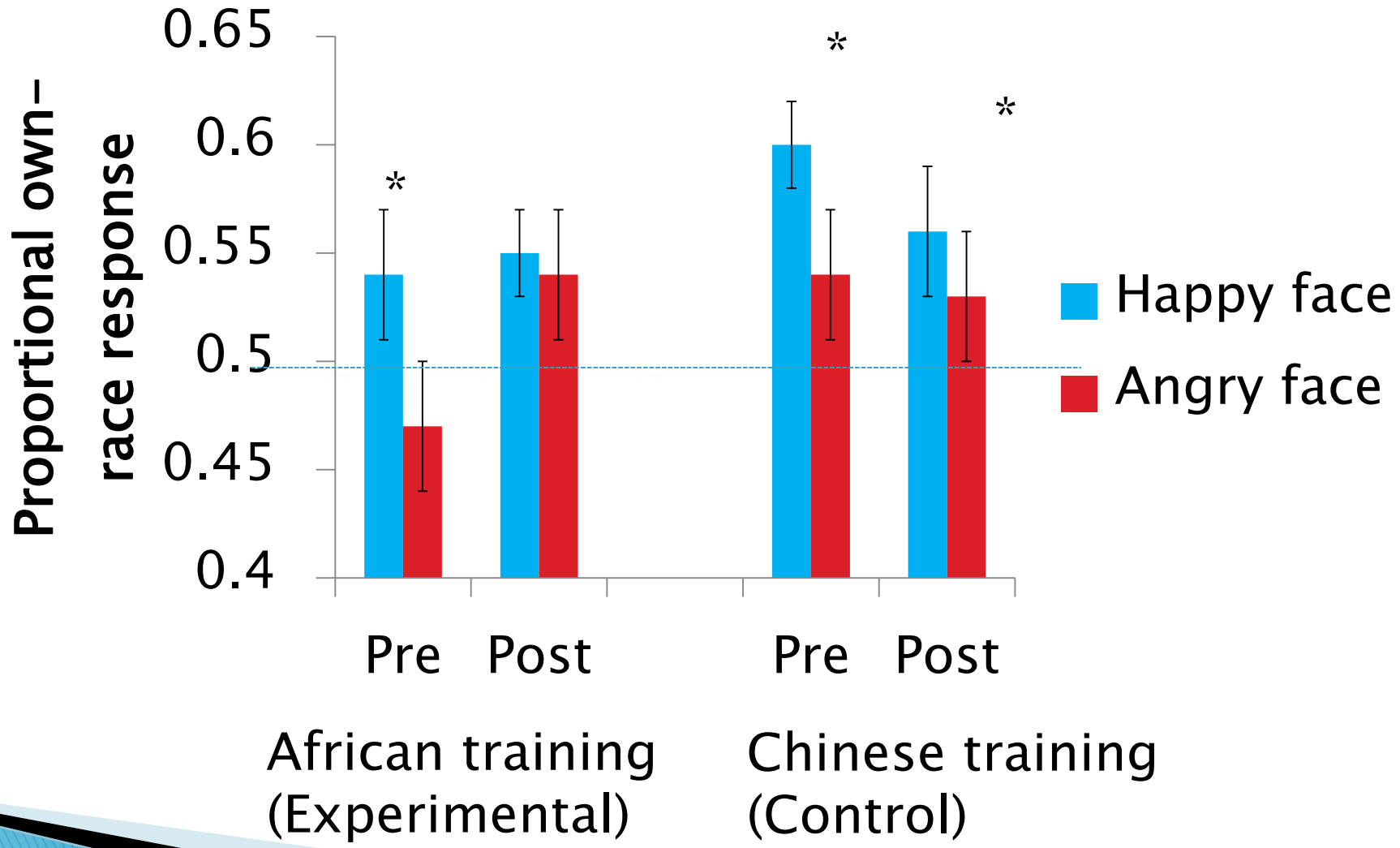
Results (Own-race responses)



Results (Own-race responses)

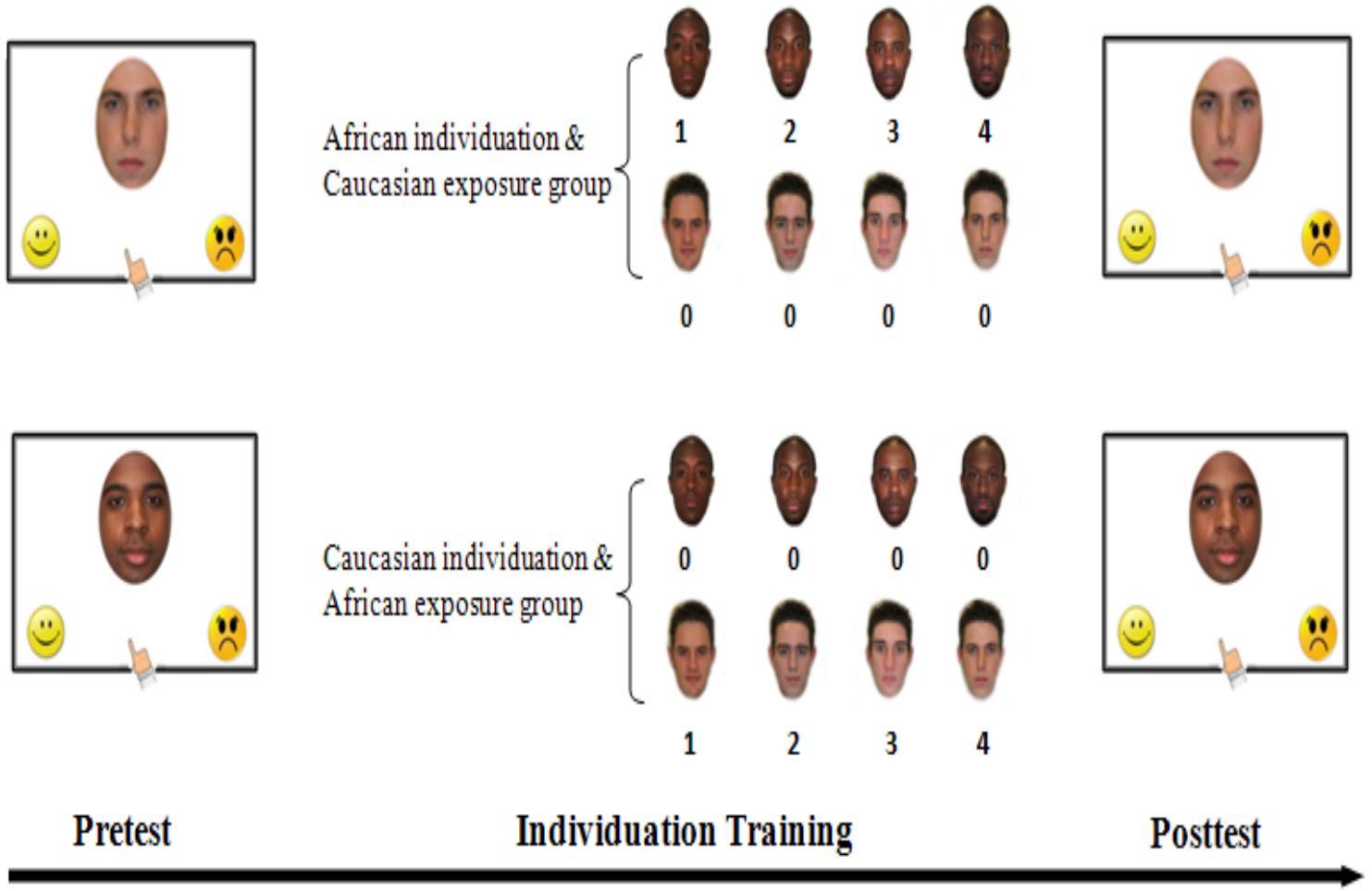


Results (Own-race responses)



Study 4.2. Reducing Implicit racial attitude in children: Immediate & specific effects

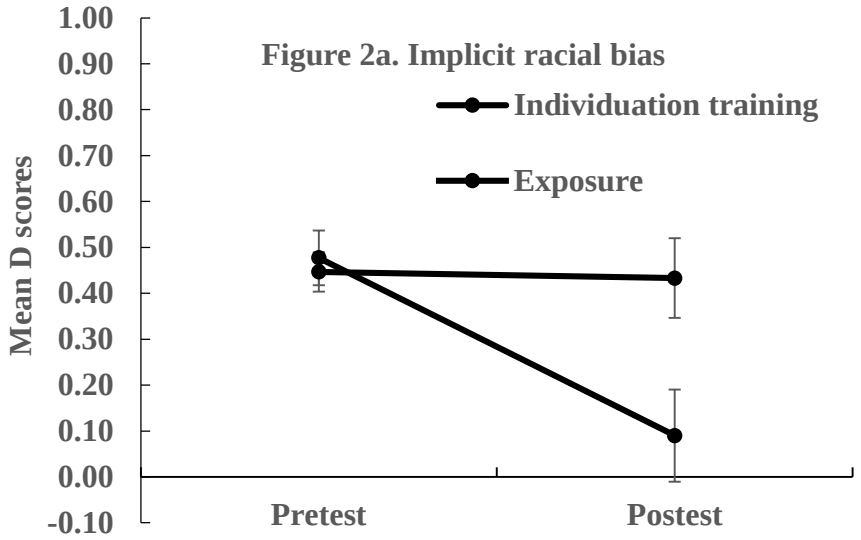
- Participants
  - 5-year-old Chinese kindergarteners
- Method
  - Real faces
    - Chinese vs. African vs. Caucasian
  - Pre- and post-test IAT tests against Africans & Caucasians
  - African individuation training/Caucasian exposure
  - Caucasian individuation training/African exposure



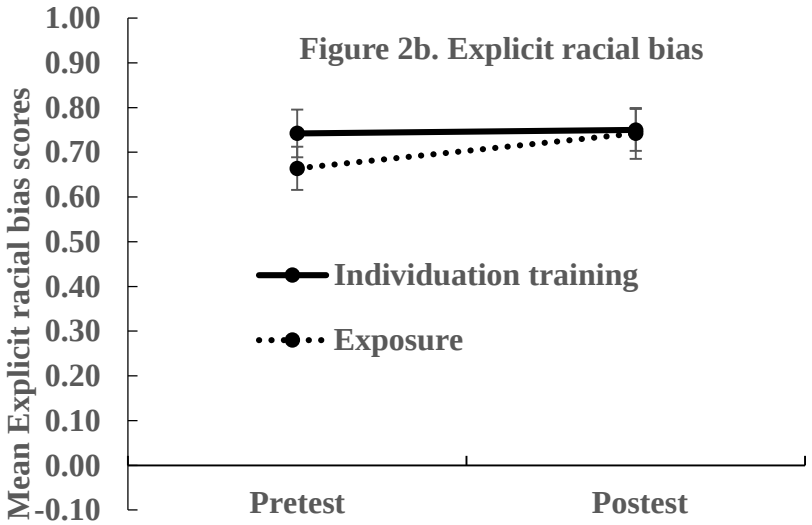
Qian et al. (2017). *Developmental Psychology*.

Attitudes toward other race faces

Implicit racial bias

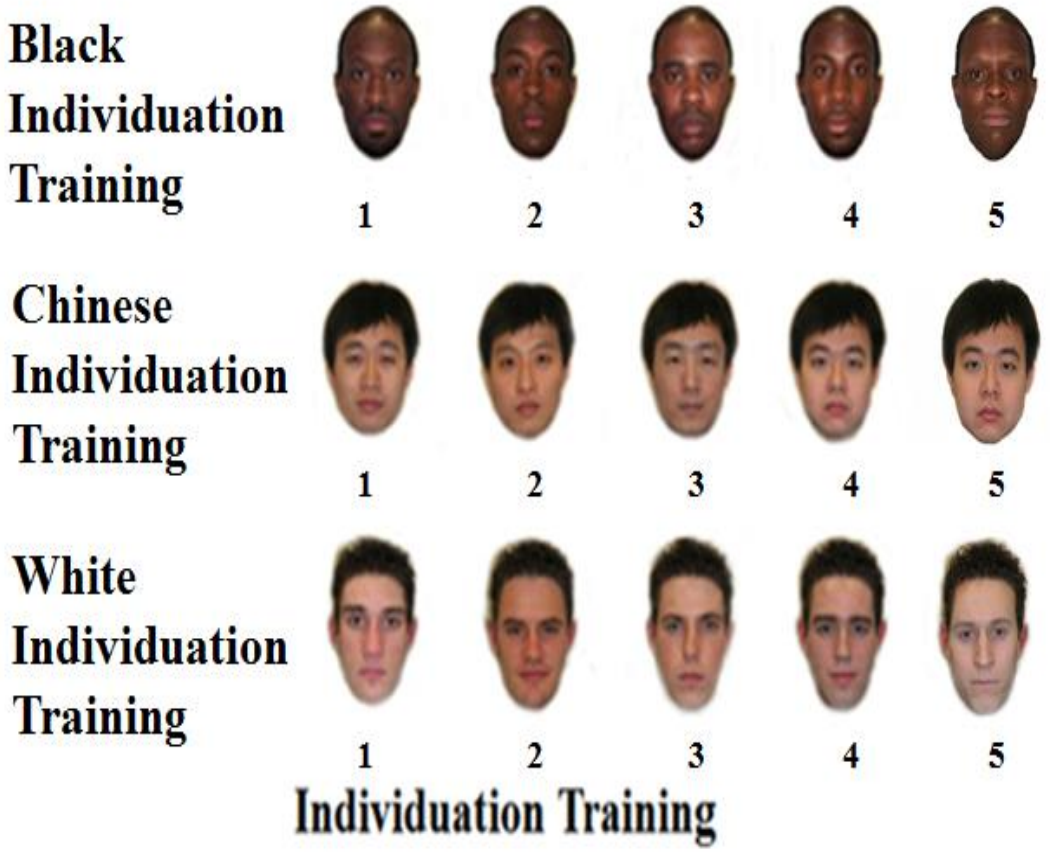


Explicit racial bias



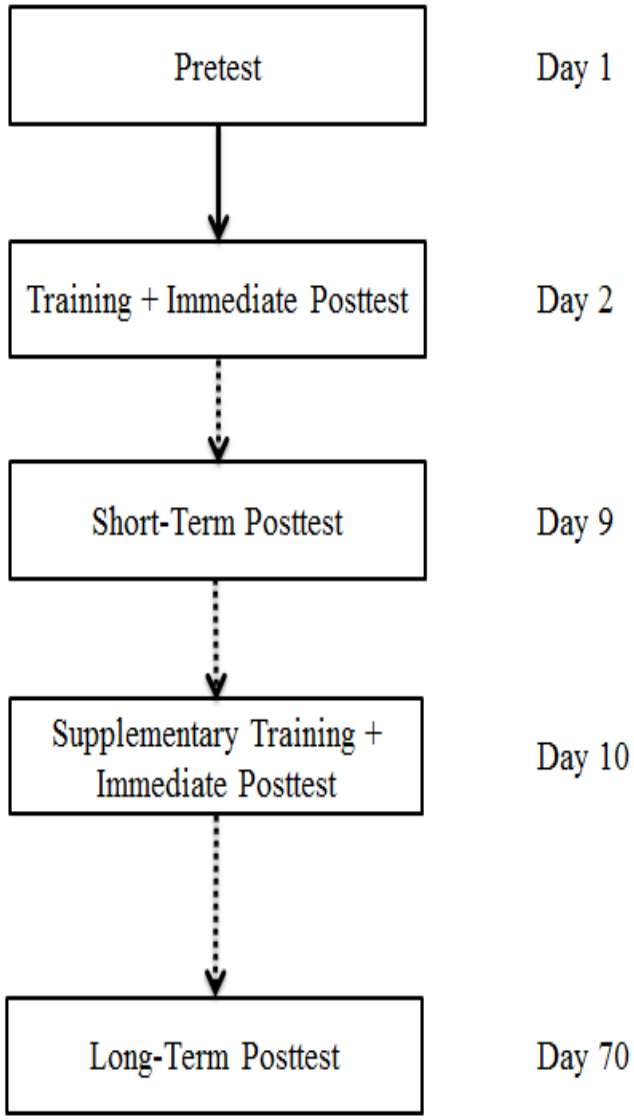
Study 4.3. Reducing Implicit racial attitude in children: Short- and long-term effects

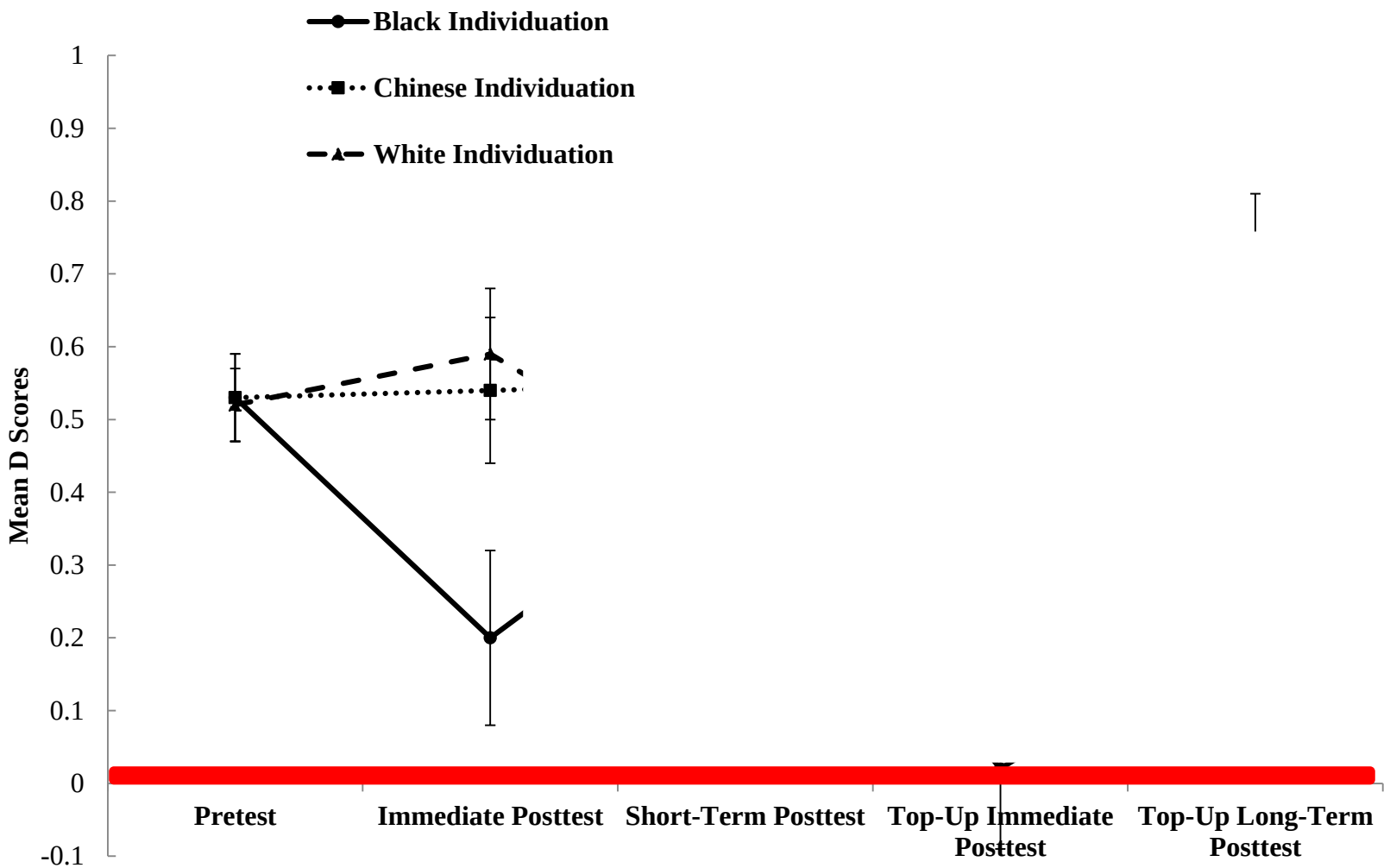
- Participants
  - 5-year-old Chinese kindergarteners
- Method
  - Real faces
    - Chinese vs. African vs. Caucasian
  - Pre- and post-test IAT tests against Africans
  - African individuation training
  - Caucasian individuation training
  - Chinese individuation training



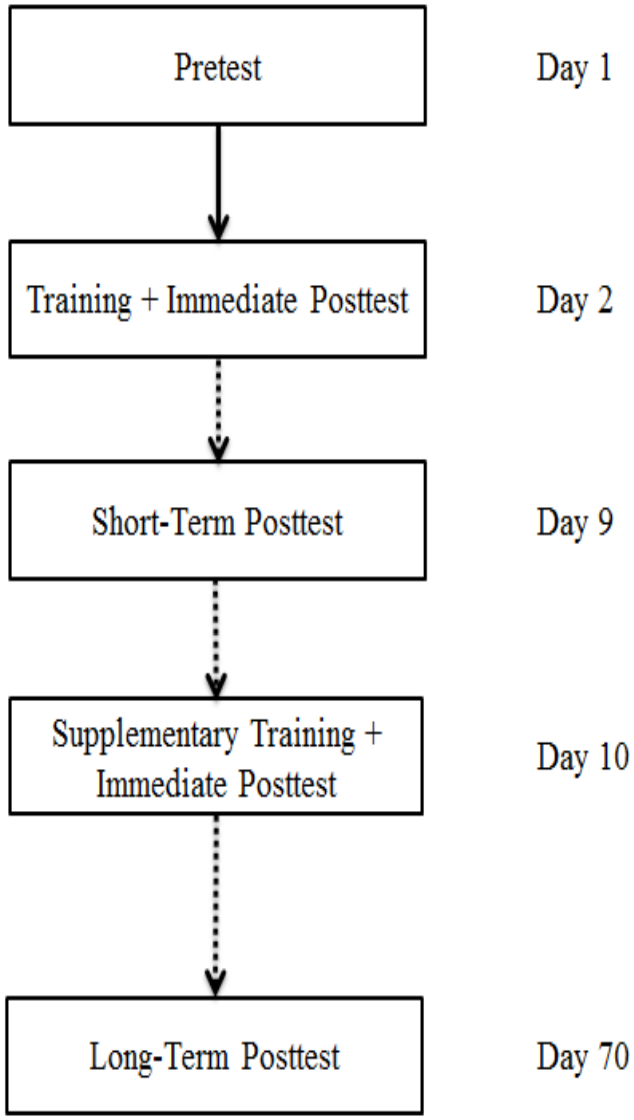
Qian et al. (under review). *Child Development*

Attitudes toward Africans





Attitudes toward Africans



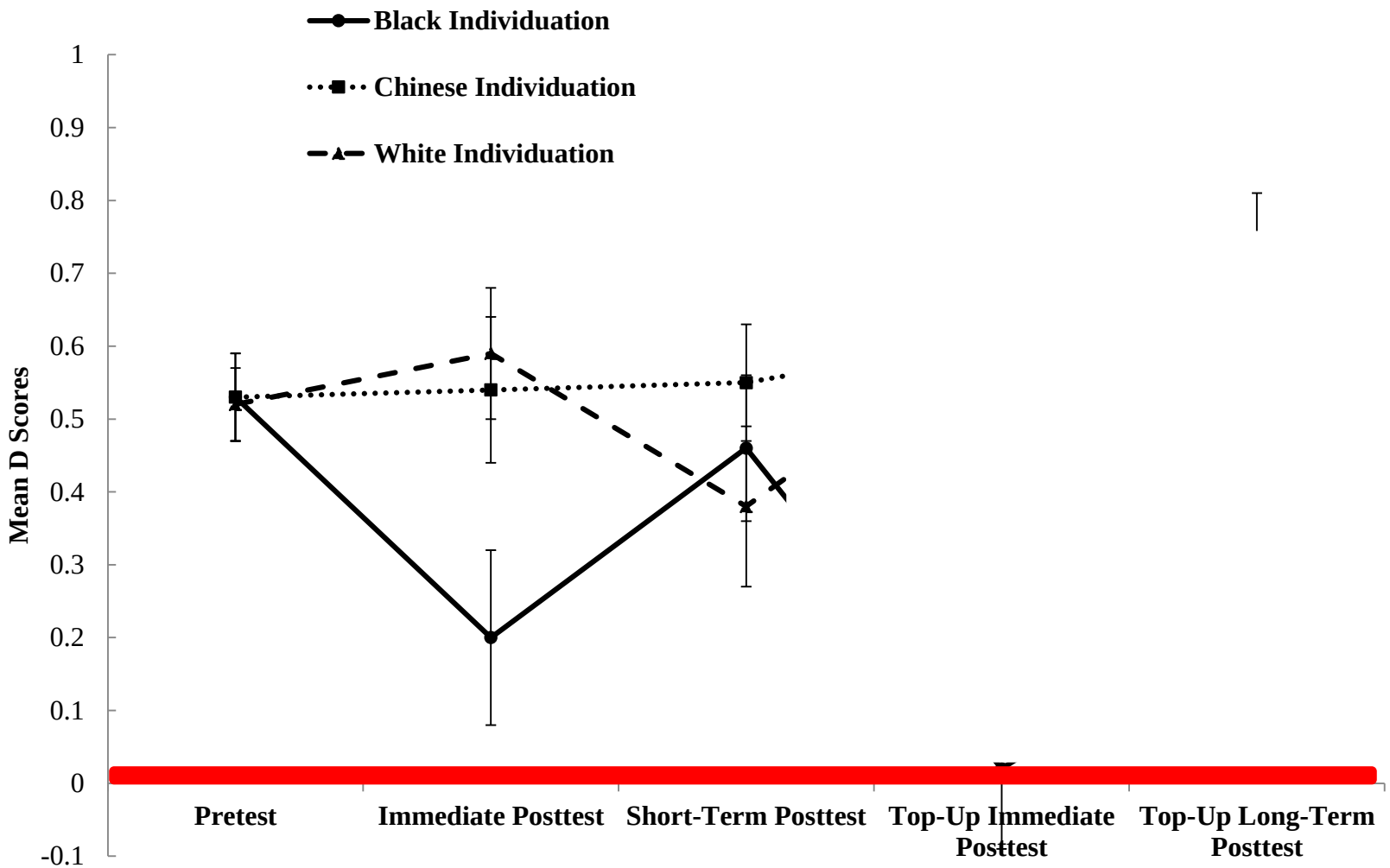
Day 1

Day 2

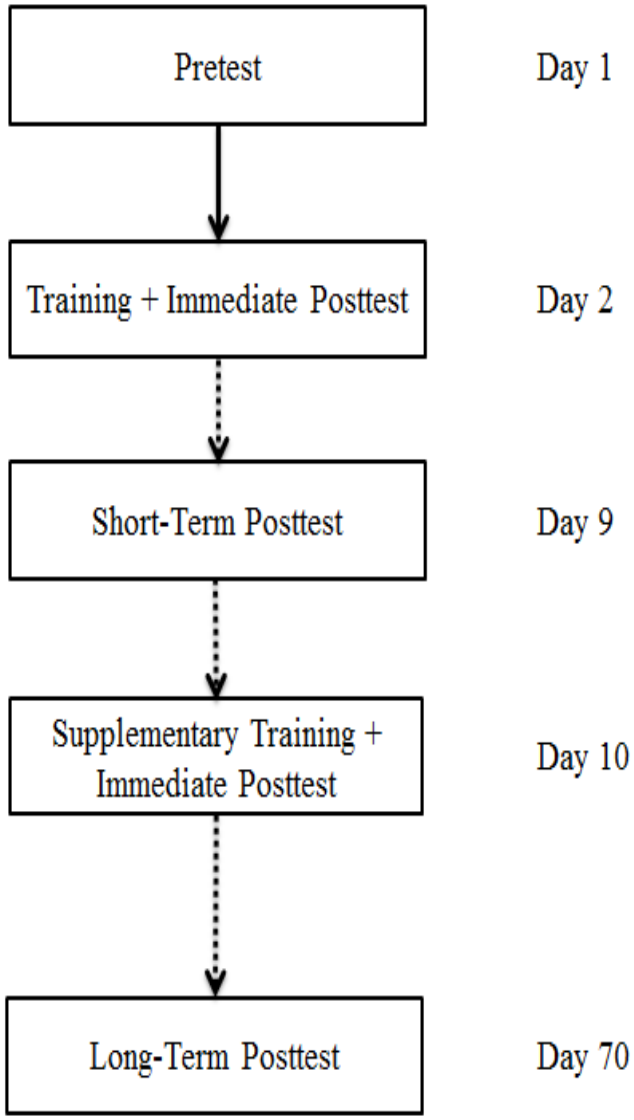
Day 9

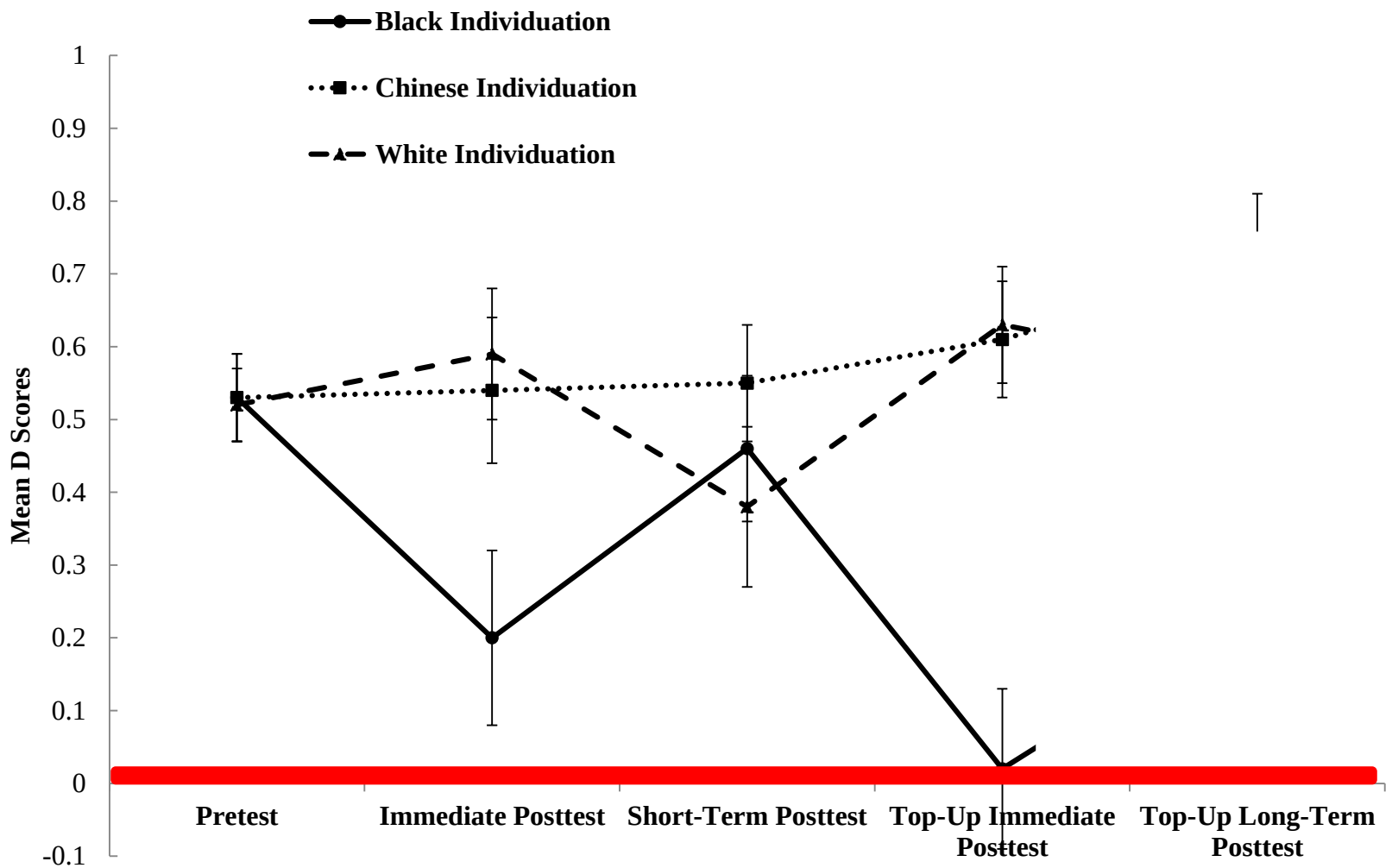
Day 10

Day 70

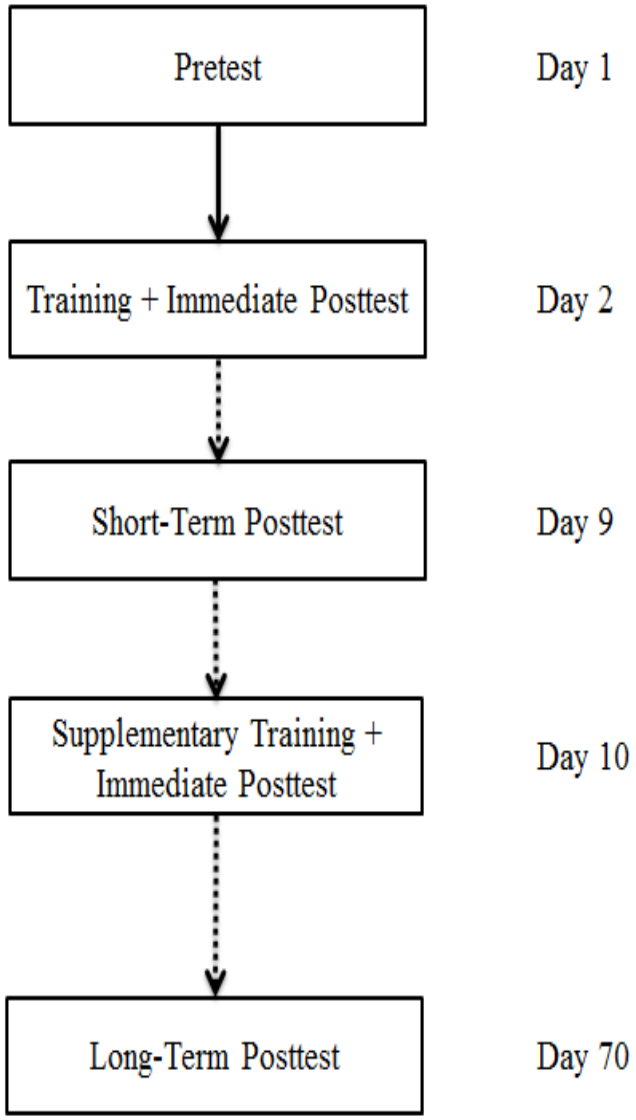


Attitudes toward Africans

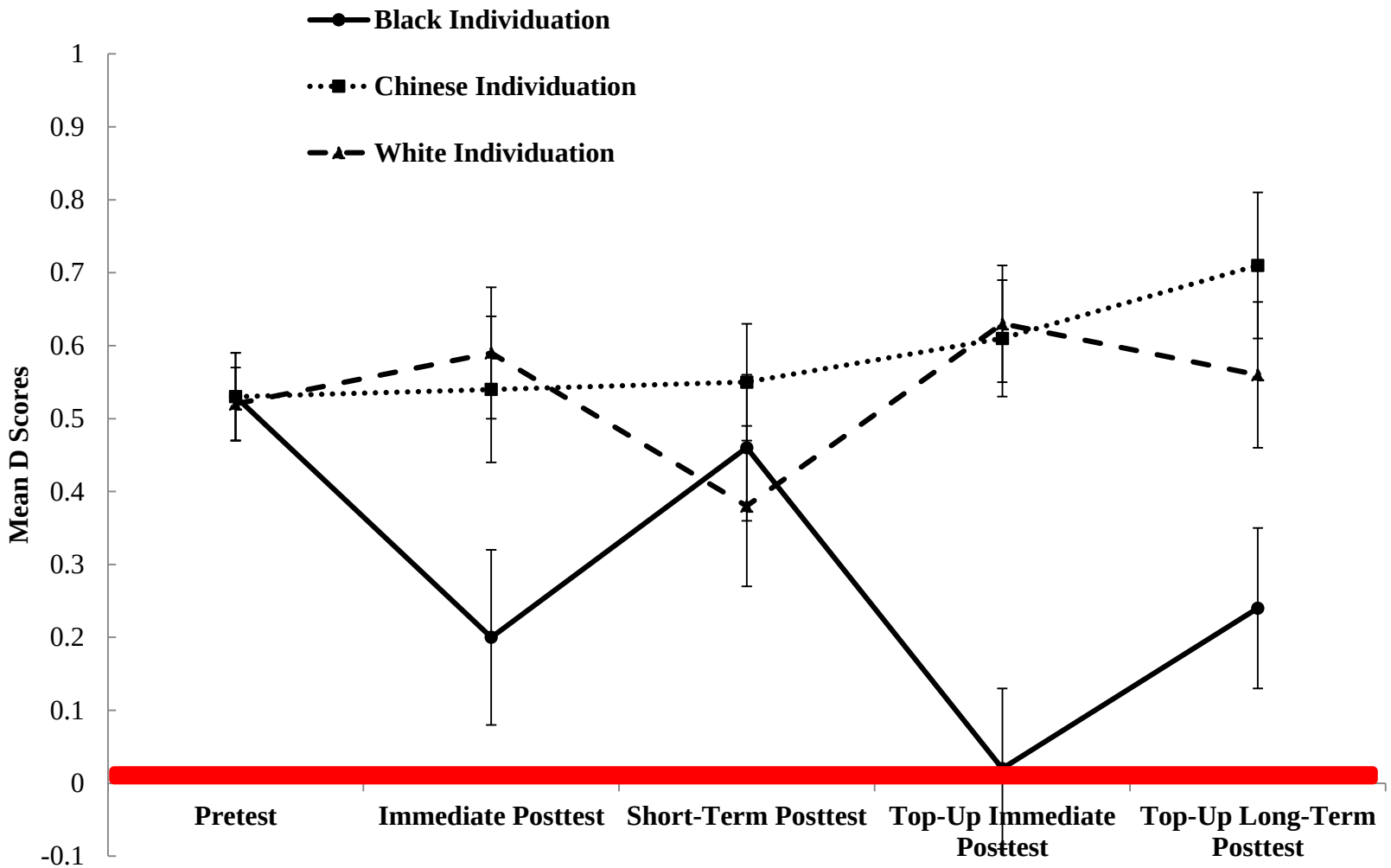




Attitudes toward Africans



Day 1
Day 2
Day 9
Day 10
Day 70



Conclusions

- The Perceptual to Social Hypothesis is supported
- Due to early asymmetry in exposure to own- vs. other-race faces, infant show racial biases in favor of own-race.
- Preschoolers show strong implicit and explicit racial biases
- Individuation training, but not mere exposure, enhances other-race face recognition and reduces negative implicit attitude towards trained other-race faces with lasting effects

Future Directions

- Randomized control trial studies on implicit racial bias reduction in preschool settings
- Explicit racial bias reduction
- Implicit and explicit racial bias in specific domains

Thank you for your attention