

Implicit racial bias moderates the impact of self-reported race/ethnicity on socially induced placebo analgesic effects

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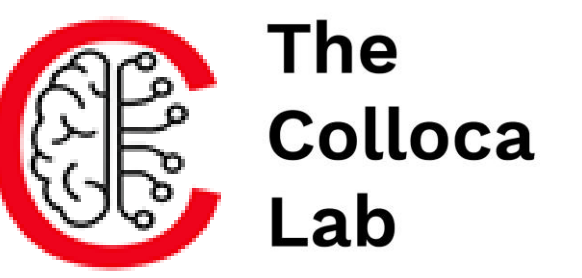
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Background

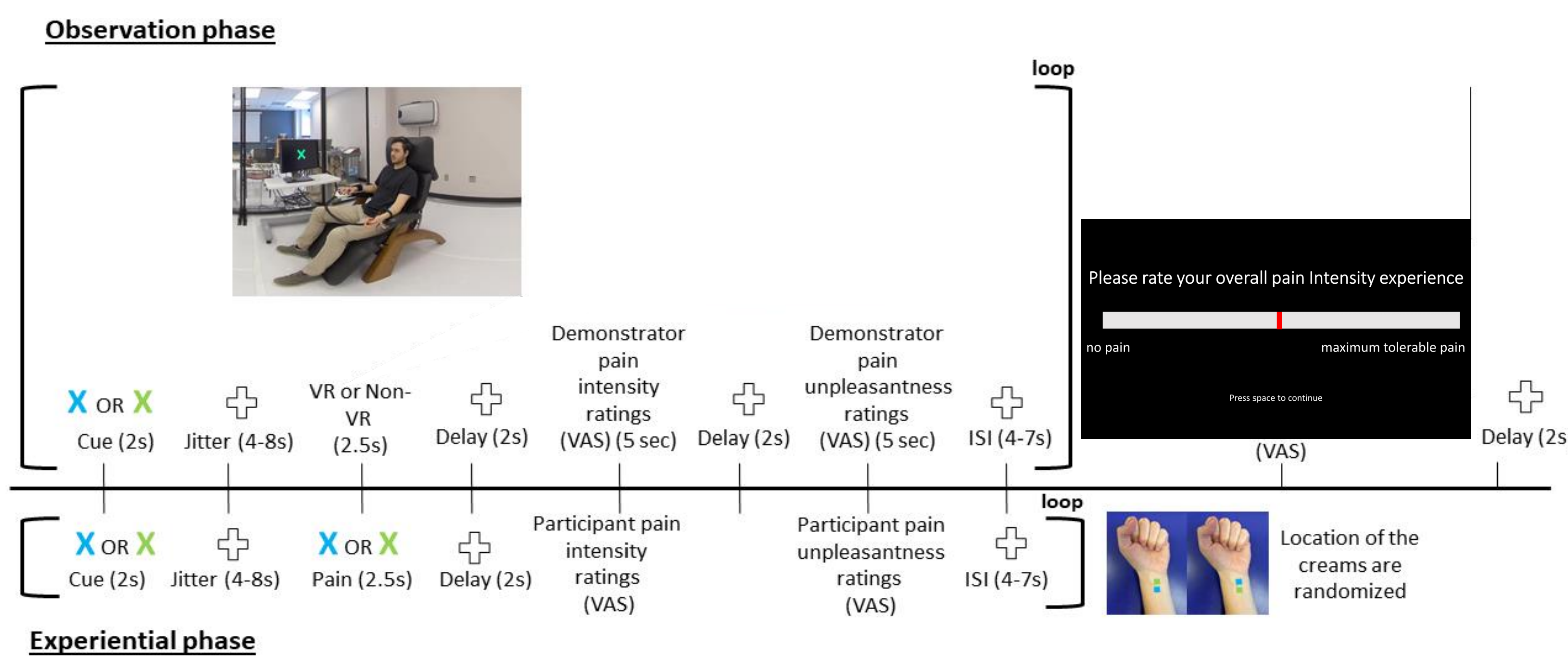
- Social learning influences placebo analgesia.
- Self-reported race/ethnicity and participant-experimenter race/ethnicity concordance have a significant impact on the placebo hypoalgesia.
- No studies examined implicit racial bias mechanisms underlying socially induced placebo effects.

Objectives

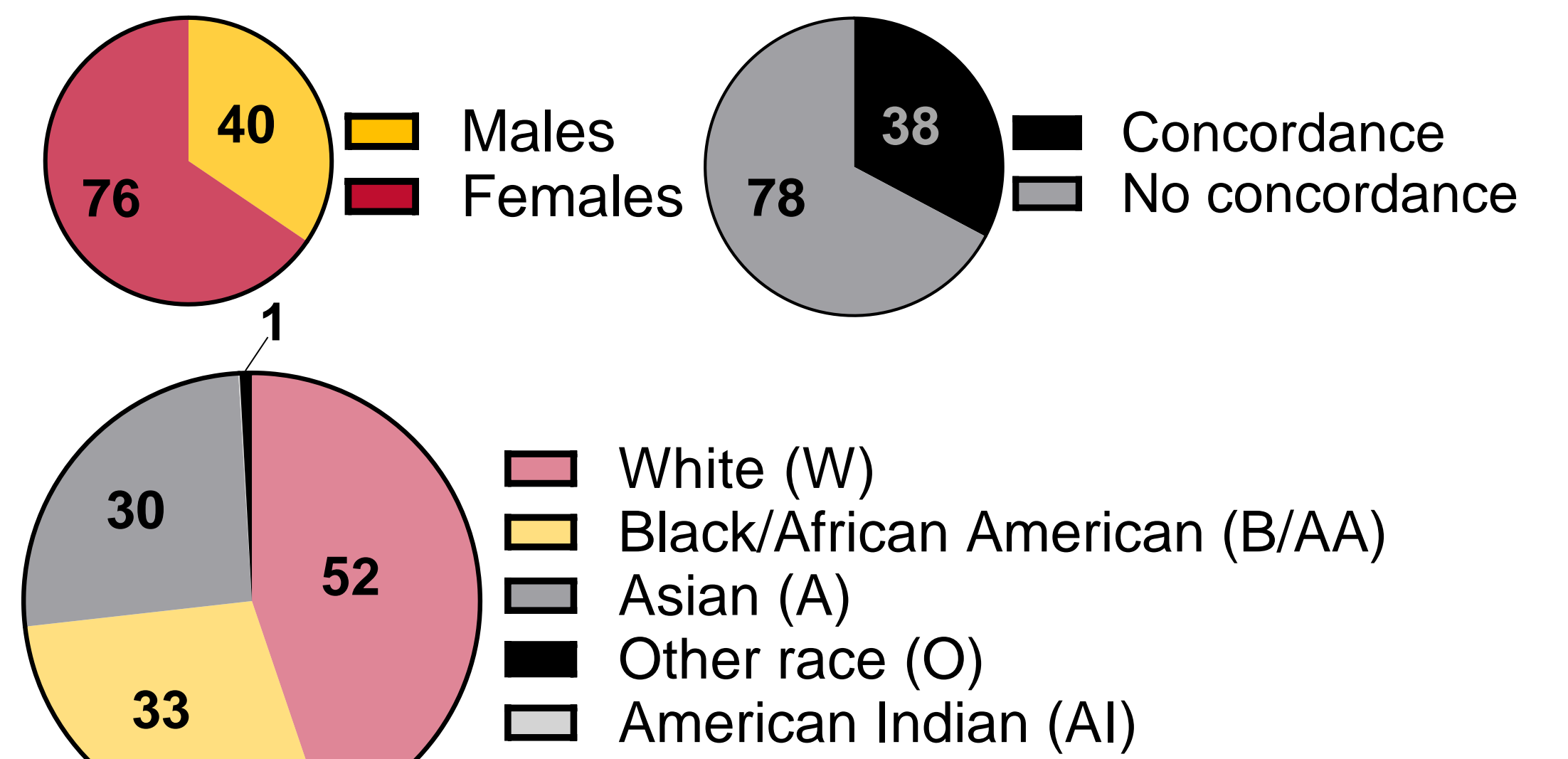
- Examine the impact of self-reported race/ethnicity, participant-experimenter race concordance on the placebo analgesia induced by social learning.
- Examine the mediation and moderation effect of implicit racial bias on the relation between race and placebo analgesia induced by social learning.

Methods

Multi-study project: three studies with social learning paradigms



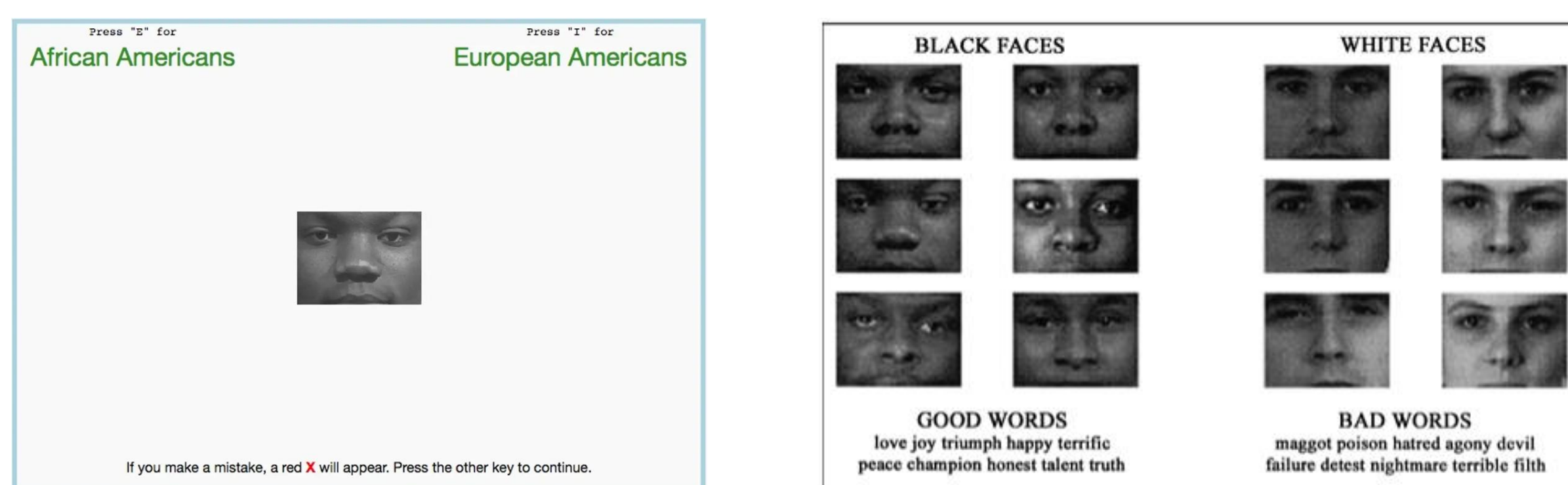
Descriptives: 116 participants



Demonstrator: W male

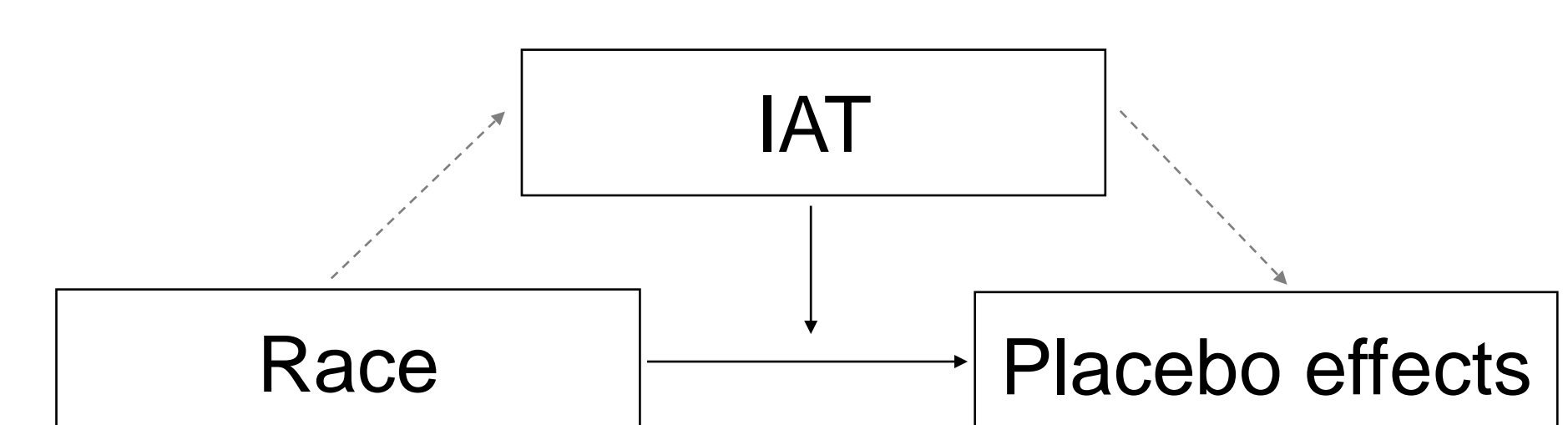
Experimenters: W, B/AA, and A females

Implicit racial bias: measured with the Implicit Association Test (IAT)



Statistics:

General linear model
PROCESS model



Results

We found no main effect of race measurements on the placebo effect and the IAT D score. However, we observed an interaction effect of race and race concordance on placebo effects in White (W) and Asian (A) participants.

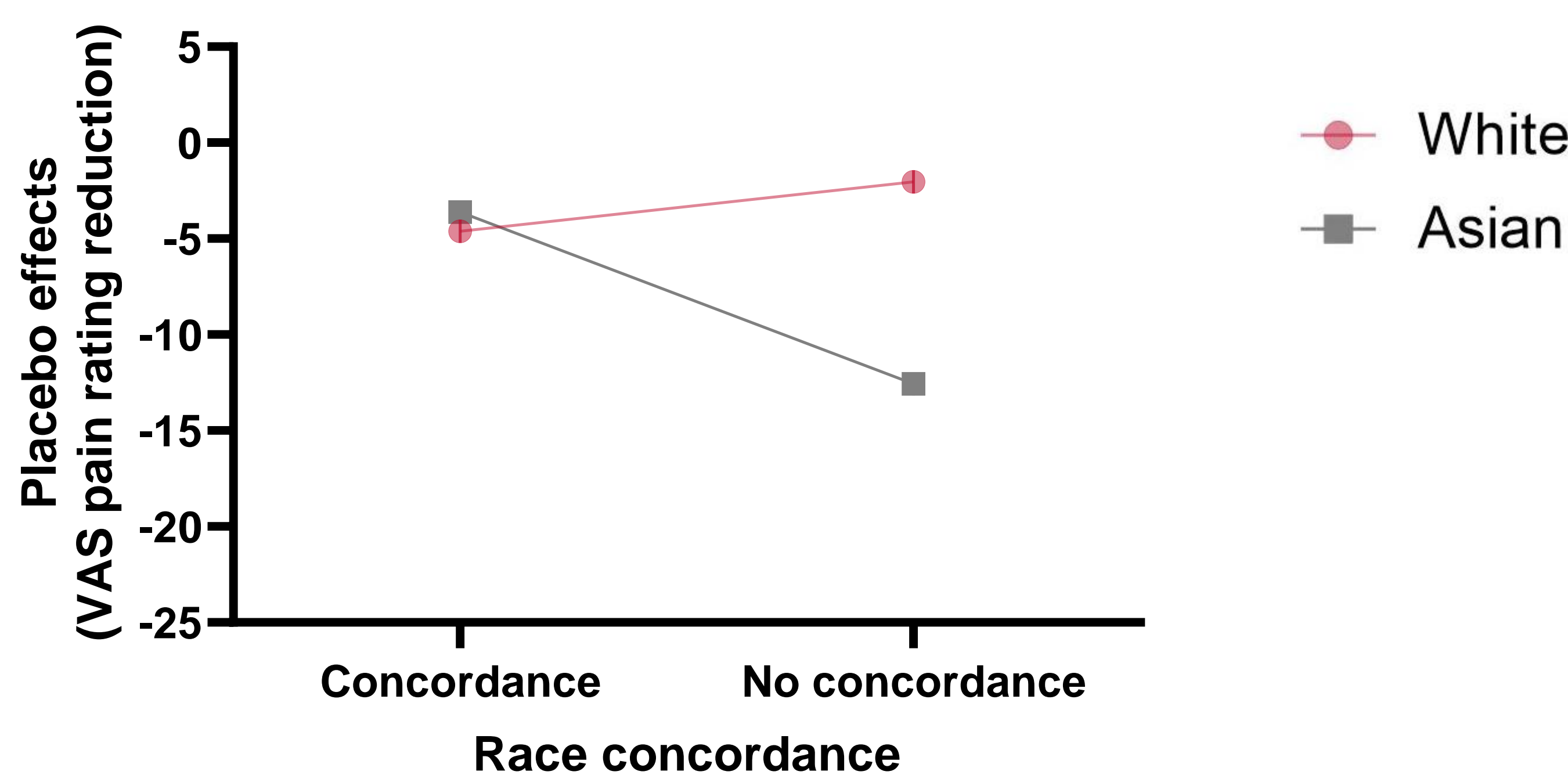


Figure 1. Interaction effect between race and race concordance. When the race was not concordant, the A participants had greater placebo effects than W participants. When there was a race concordance, W and A had similar magnitude of placebo effects.

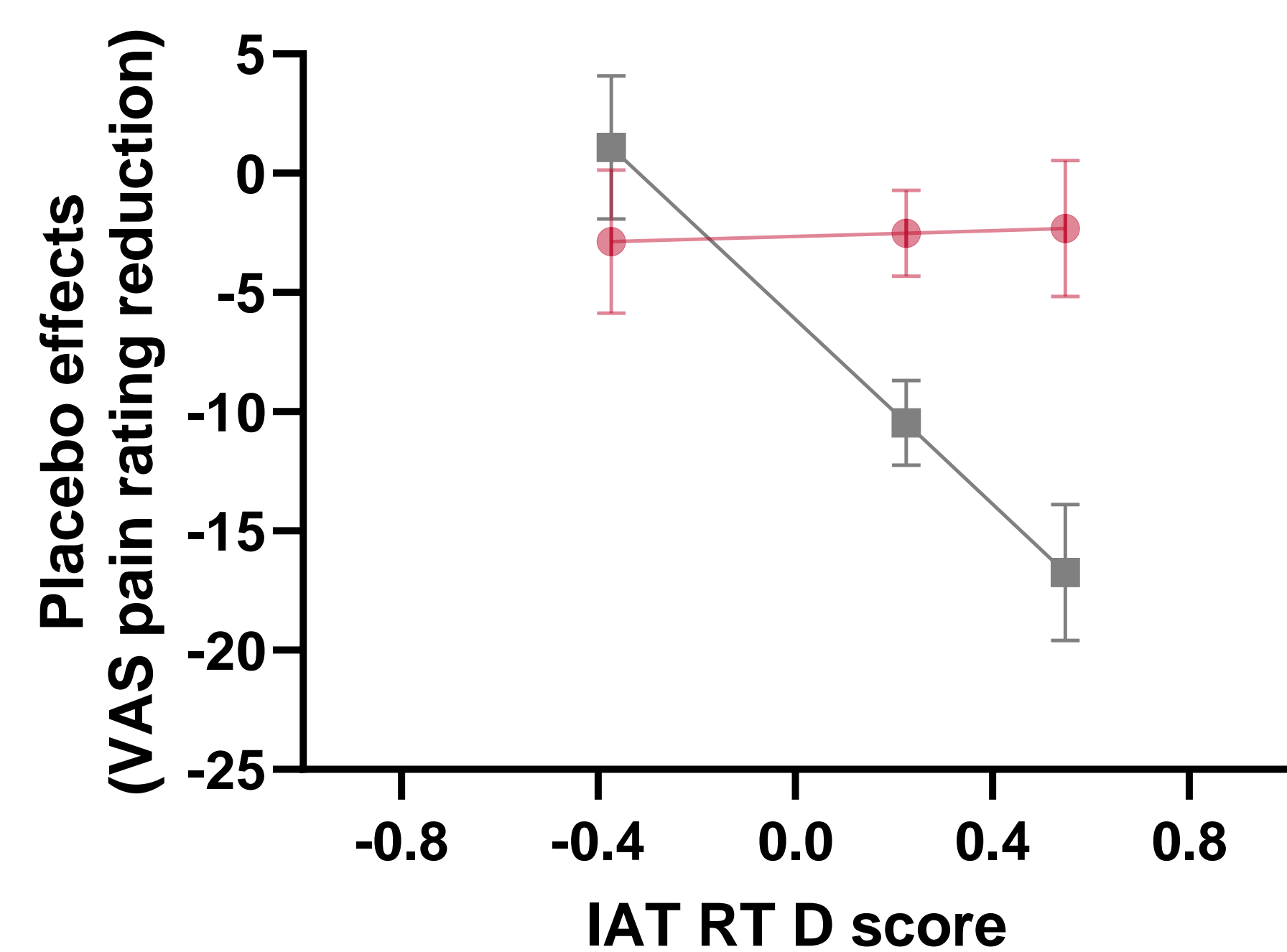


Figure 2. Moderation effect by Implicit Racial Bias on the magnitude of placebo effects on pain intensity ratings. The higher placebo effects in A were moderated by an implicit positive bias towards W people. This effect wasn't observed in W people.

Conclusion

- We had demonstrated an impact of race/ethnicity on conditioned placebo effects.
- We expanded upon previous results and demonstrated that racial /ethnicity influences are moderated by implicit racial bias in W and A participants.
- This indicates that the mere direct effect of race is not enough to grasp the complexity of racial/ethnicity in the context of placebo effects.

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