Normalizing Anomalies with Mobile Exposure (NAME): A novel intervention for reducing implicit biases against people with facial anomalies

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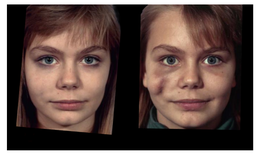
Background

Can exposure to people with facial anomalies reduce implicit bias towards them?



Exposure to others can modify implicit biases: robust biases reported against facial anomalies, may result in dehumanization [1,2]

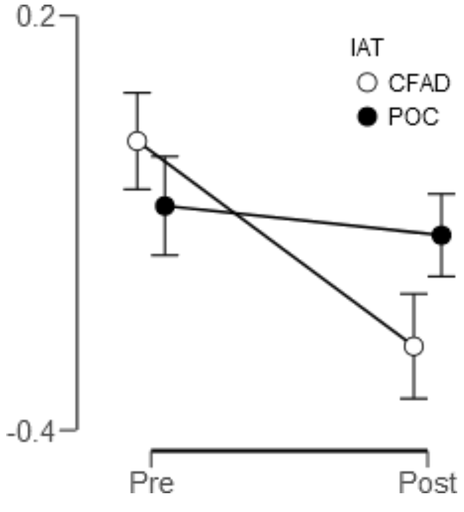
- Mere exposure reduced implicit bias about racial outgroups [3]
- Exposure to information about others may humanize them [4]

Hypothesis: Implicit biases result from a lack of exposure to stigmatized outgroups.

- Prediction 1: Exposure to facial anomalies will reduce implicit bias scores (pre- vs. post-exposure) towards people with facial anomalies, but not people of color (POC)
- Prediction 2: Exposure to POC, an already familiar group, will not reduce implicit biases towards POC, nor towards people with facial anomalies

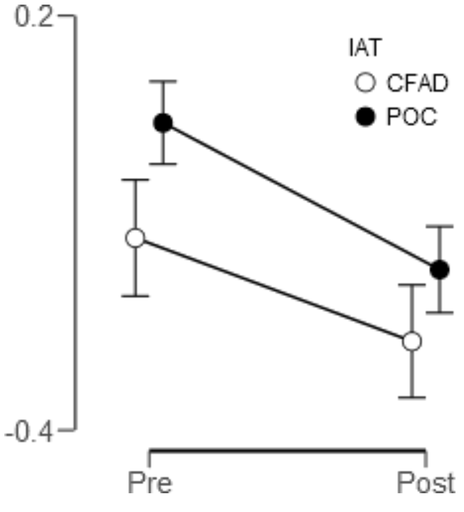
Results

Intervention with Anomalous Faces



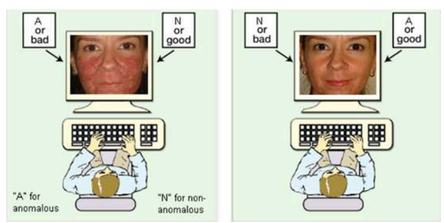
$F(1, 48) = 4.705$, $p = .035$, $\eta 2 = 0.089$

Intervention with Faces of People of Color

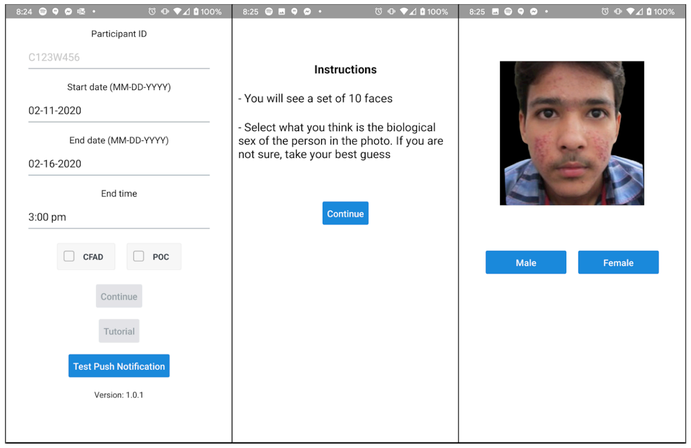


$F(1,48) = 0.167$, $p = 0.685$, $\eta 2 = .003$

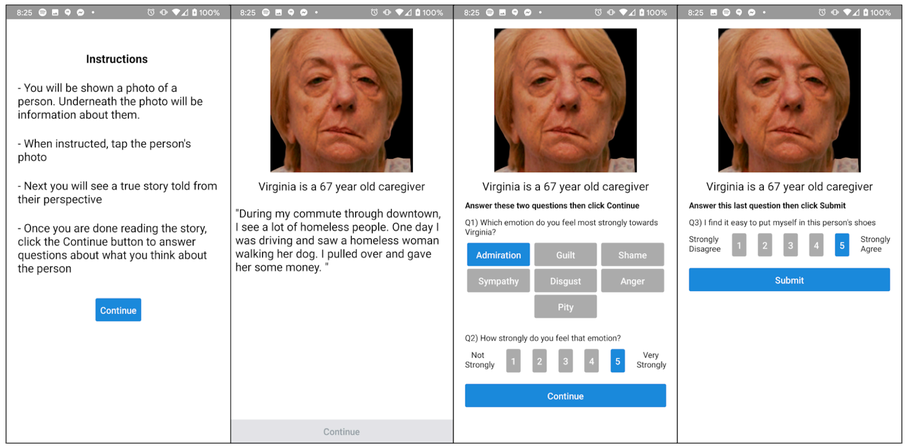
Fig. 1 | Experiment Flow



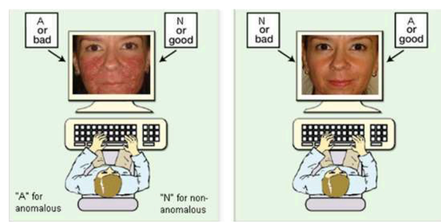
1. Pre-Intervention IAT



2a. Exposure Module



2b. Humanization Module



3. Post-Intervention IAT

Method

Participants: N = 100 (24 female; age = 24.3 ± 7.1)

Pre-Registration: https://osf.io/vm7d4/

Experiment Flow (Fig. 1)

- Implicit association tests (IAT) conducted pre- and post-intervention
- iPhone / Android app-based intervention completed twice daily for five days, exposure to 11 photos of either POC or people with facial anomalies:
  1. *Exposure:* 10 photos of faces (POC or anomalous) with neutral expressions, judged the biological sex of the person in the photograph (male or female)
  2. *Humanization:* 1 photo (POC or anomalous) paired with a prosocial story ostensibly about them, with questions for cognitive and affective empathy

Discussion

- Exposure to people with facial anomalies, but not POC, reduced implicit bias
- Builds on the work of two previous studies to suggest negative attitudes towards facial anomalies can be mitigated through exposure
- *Next steps:* What predicts the intervention's efficacy? Do reductions in implicit biases correspond to reductions in relevant dehumanizing behaviors?
- *Future directions:* Mobile app-based curriculum for other implicit bias reductions?

References

- [1] Jamrozik et al. (2019). More than skin deep: Judgments of individuals with facial disfigurement. Psychol Aesthetics, Creat Arts. doi: 10.1037/aca0000147
- [2] Hartung et al. (2019). Behavioral and neural responses to facial disfigurement. Sci Rep. doi: 10.1038/s41598-019-44408-8
- [3] Majdandzic et al. (2012) The human factor: behavioral and neural correlates of humanized perception in moral decision making. PLoS One doi: 10.1371/journal.pone.0047698
- [4] Zebrowitz et al. (2008). Mere exposure and racial prejudice: exposure to other-race faces increases liking for strangers of that race. Soc Cogn. doi:10.1521/soco.2008.26.3.259