

Lost in the Crowd: How Racial Biases Affect Face Memory

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ABSTRACT

Every year, approximately 100,000 missing persons are reported to the police. In addition to conducting their own searches, authorities often call upon the public for assistance, using methods such as lost person-posters, social media posts, AMBER alerts, and billboards. The efficacy of these methods relies on the people seeing them engaging multiple memory-related processes: They must attend learn the features of the missing person, remember to be on the lookout, and then successfully recognize the missing person once they are spotted. These processes place heavy demands on prospective memory (PM), the ability to remember to do something in the future. Unlike laboratory PM tasks, search for missing persons has a social element: Often, the missing person will be from a different social or racial group than the people called upon to search for them. Historically, efforts to search for missing people from non-White ethnic groups get less effort and publicity than searches for people from White ethnic groups. Our research expands on recent findings showing that search for non-White missing persons is more challenging by testing techniques to improve detection of non-White missing persons. Participants in our study completed unrelated face processing tasks while attempting to spot a White or Asian “missing person.” The missing persons alerts participants were shown depicted either one or three photos of the missing person. Results will inform best practices in calling upon the public for assistance with search for missing people.

BACKGROUND

- Prospective Memory (PM) is “remembering to remember.” It is a memory system that enables people to recall an intention to do something in the future (1).
- Person Prospective Memory (PPM) is a sub class of “event based” PM (2), where individuals must remember to perform an action once they encounter a specific person (e.g., AMBER alerts).
- People generally have less success recognizing faces of other ethnicities than their own (3).
- Prior research has found that participants looking for Caucasian faces detected them at a higher rate than participants looking for Indian/Asian faces (4).

HYPOTHESES

H₁: Other-race PM faces will be more challenging to spot.

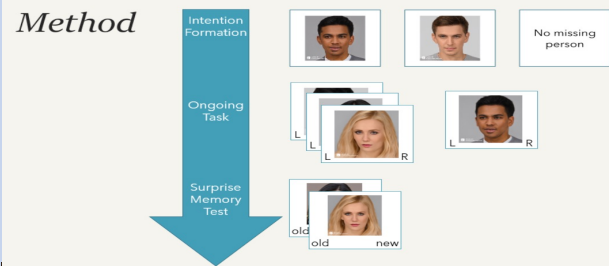
- Other-race PM will be both slower and more error-prone, relative to own-race PM.
- Ongoing task (OT) performance will be selectively slowed when evaluating non-PM other-race faces while monitoring for other-race PM faces.

H₂: Encoding multiple images of PM faces will improve PM detection, especially for other-race faces.

- Seeing multiple photos of the PM face will benefit PPM.
- Other-race PM will be selectively enhanced by multiple photos.

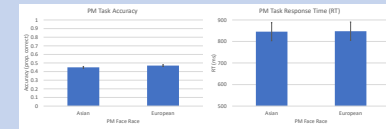
GENERAL METHOD

- Participants: n = 120 (M_{age} = 19.37)
- Design: 2 (Missing Person Race: Asian/European) x 2 (Number of Photos: One/Three) between-subjects design.

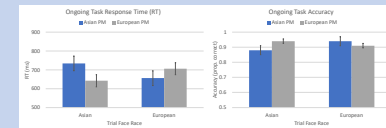


RESULTS

H₁: Other-race PM faces will be more challenging to spot.



- No differences in PM performance in preliminary data.



- OT performance is slower and more error-prone when the PM and ongoing task faces are from the same race.

H₂: Other-race PM faces will be more challenging to spot.

- Data collection is ongoing.

DISCUSSION

- H1: Given no difference in PM performance, it appears that other-race faces are just as easy to spot with this method (3).
- H2: Data Collection is ongoing.

Implications for Prospective Memory

- Method results imply that PM is much better when exposed to multiple PM faces.

Implications for Real Life Missing People

- Improvements possible when missing person alerts supply multiple face photos for same and other-race bystanders.

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