

## The brain's facial recognition area doesn't differentiate outgroup members

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The fusiform facial area, the brain region that responds to faces. Credit: Reggev et al., eNeuro 2020

A quirk in how the brain processes faces makes it harder to tell members of a racial outgroup apart, according to new research published in *eNeuro*.

People struggle to differentiate between members of social outgroups, including different races. This can have dire consequences, like when <u>white</u> <u>people</u> misidentify a black perpetrator in a police lineup.

Reggev et al. investigated what happens in the brain's visual processing system to cause this discrepancy. The research team showed white adults a series of faces of the same race and gender. The participants indicated if they saw the same face twice in a row, or two different faces. The participants could identify two white faces as different more quickly than two <u>black faces</u>.

The scientists then looked at the activity of the fusiform facial area using <u>functional magnetic</u> resonance imaging. Seeing the same face twice in a row suppresses <u>neural activity</u> in this brain region. The suppression lifted when participants saw a new face —but only for white faces. In fact, with new black faces, the suppression resembled

seeing the same face twice in a row. This attribute of visual processing explains the difficulty people experience distinguishing between members of an outgroup.

These findings may result from life-long exposure to ingroup faces or from different motivation to process such faces.

**More information:** Human Face-Selective Cortex Does Not Distinguish Between Members of a Racial Outgroup, *eNeuro*, <u>DOI:</u> <u>10.1523/ENEURO.0431-19.2020</u>

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