

## Brain responds to racial difference: Study

BY ALLISON CROSS, CANWEST NEWS SERVICE APRIL 26, 2010 COMMENTS (10)

New research by Canadian scientists into the origins of human prejudice has found the brain responds differently when interacting with someone of a different race.

"We know that prejudice exists, even in subtle forms, and has changed over the years," said Michael Inzlicht, one of the study's authors and an assistant professor of psychology at the University of Toronto Scarborough. "But we wanted to see how that would manifest itself in the brain."

Participants in the study — all white men — watched videos of white, black, South Asian and East Asian men picking up a glass of water and taking a sip.

While the white men watched the videos, scientists hooked them up to electroencephalogram machines (EEG), which monitored whether or not their brains mimicked what they saw.

Scientists found there was less activity in the motor-cortex area of the brain when the white men were watching someone of a different race. Typically the brain responds as though it's performing the action itself.

"What we found is that there is a basic difference in the way peoples' brains react to those from other ethnic backgrounds," said PhD student Jennifer Gutsell, another author of the study. "Observing someone of a different race produced significantly less motor-cortex activity than observing a person of one's own race. In other words, people were less likely to mentally simulate the actions of other-race than same-race people."

The brain's ability to mimic or simulate an action, sometimes called the mirror-neuron-system, is linked to the brain's ability to feel empathy by mirroring the emotions of others, Inzlicht said.

"Evolutionary biologists or psychologists, they say these are the building blocks for empathy," he said. "This doesn't mean this is inevitable or this is natural or it can't be changed. In fact, you've got lots of research that shows it can change."

The study looked at the brain activity of white men observing white and non-white men, but the results aren't likely to be any different if researchers monitored the brain activity of another race, Inzlicht said.

"There's nothing special with white men or black men or others," he said.

Inzlicht said similar studies have monitored participants as they watched someone of a different race express an emotion, like sadness.

"When that someone else belonged to a different group, they didn't simulate those emotions and that was true if you were white and you were observing someone black or if you were South Asian and you were observing someone East Asian," he said.

The next step in the research by Inzlicht and Gutsell is looking at how people can change.

"We're not saying this is the natural way people are, but this is the way maybe they learned or socialized or what not," Inzlicht said. "One thing you can do is get people to take the perspective of someone else and kind of put yourself in their shoes . . . will that lead to more mental simulation in these mirror neurons? We don't know. It's still an open question."

The study was published in the Journal of Experimental Social Psychology.

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