

Gay men's bilateral brains better at remembering faces: study

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Gay men can recall familiar faces faster and more accurately than their heterosexual counterparts because, like women, they use both sides of their brains, according to a new study by York University researchers.

The study, published in the journal, *Laterality: Asymmetries of Body, Brain and Cognition*, examined the influence of gender, [sexual orientation](#) and whether we're right-or-left-handed on our ability to recognize faces. It found that when memorizing and discriminating between faces, [homosexual men](#) show patterns of bilaterality - the usage of both sides of the brain - similar to heterosexual women. [Heterosexual men](#) tend to favour the right hemisphere for such tasks.

"Our results suggest that both gay men and heterosexual women code faces bilaterally. That allows for faster retrieval of stored information," says study lead author Jennifer Steeves, Associate Professor, Department of Psychology, Faculty of Health.

Study participants were asked to memorize photographs of ten faces, and differentiate them from 50 others, shown to them for only milliseconds each. The images were rendered in black and white and edited to remove ears, hair and blemishes, which can serve as obvious identifying cues. Participants then had to relay which faces were new, as quickly and accurately as possible.

Steeves and her colleagues also investigated the influence of hand dominance on such tasks. They found that left-handed heterosexual

participants had better [face recognition](#) abilities than left-handed homosexuals, and also outperformed right-handed heterosexuals.

Hand dominance is thought to be linked with both hemispheric functioning and sexual orientation; previous studies have shown that homosexual individuals are 39 per cent more likely to be left-handed.

"Our findings are consistent with what we know about the organization and laterality of how we process faces depending on our gender, sexual orientation and handedness," Steeves says.

Anatomical studies of the corpus callosum, which facilitates communication between the left and right hemispheres of the [brain](#), also indicate differences in handedness: women and left-handed men have been shown to possess larger corpus callosum and more symmetrical cortices than right-handed men.

"These anatomical differences likely contribute to the more lateralized performance results seen among right-handed and heterosexual men," says Steeves.

More information: The study, "Sex differences in face processing are mediated by handedness and sexual orientation," was co-authored by York University psychology graduate student Caitlin R. Mullin, and York undergraduate psychology students Paul W. H. Brewster, and Roxana A. Dobrin.

Provided by York University

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