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## Laurier study links narcissism to basic brain mechanism

WATERLOO – Narcissists have behavioural traits that are inherently antisocial: they show a disregard for other people, lack empathy, and often use people without meaningfully connecting with them. Wilfrid Laurier University associate professors of psychology Christian Jordan and Sukhvinder Obhi conducted a research study linking narcissism to a basic brain mechanism known as “motor resonance,” or the natural tendency of the brain to simulate what it sees another person doing.

Obhi’s lab at Wilfrid Laurier University’s Waterloo campus studies motor resonance, an automatic process that links actions people see in others to similar goals, thoughts or actions that they have themselves. This mechanism may contribute to people being able to better understand the actions and feelings of others, an ability that Obhi has termed “inter-subjective sensitivity.”

Jordan and Obhi worked together to create a study that tests whether people who display typical narcissistic traits have a reduced tendency to resonate with the actions of other people.

Their experiment involved participants watching two things on a computer screen simultaneously: a video of a hand lifting either its index or middle finger off keys on a keyboard, and either the number “1” or the number “2.” The participants had been told to lift either their index or middle finger, based on whether they saw a number “1” or “2” on the screen. Sometimes, the hand on the screen lifted the finger that did not correspond to the number shown. Because of the brain’s tendency to imitate what it sees another person doing, participants took longer to respond to the number “1” or “2” when the hand in the video performed the other action. Crucially for the hypothesis, participants who were higher in narcissism took less time to choose a finger in response to the number, which suggests that their brains did not simulate the action of the hand on the screen to the same degree as those who were lower in narcissism.

“The results are exciting because this is a low-level, basic mechanism in the operation of the brain that could inform, in part, higher-order processes like empathy,” said Jordan.

“It could be a part of the story that explains how narcissism is associated with changes in the mechanisms involved in social perception,” Obhi concurred. “The experiment opens more questions about what other processes are involved in making one person more narcissistic than another.”

Both Jordan and Obhi agree that the research has interesting societal implications about the behaviours of “typically narcissistic” people, such as stars or people in positions of power. There is also data that suggests rates of narcissism have been increasing, which supports anecdotal evidence of younger generations having a greater sense of entitlement and higher self-esteem (the latter being a healthier form of positive self-feelings).

“Trends in society have steered us towards individualism and away from community,” said Jordan. “Well-intentioned efforts to raise the self-esteem of our youth could be contributing to higher levels of narcissism.”

The study, which Jordan and Obhi co-authored with their graduate students Jeremy Hogeveen and Miranda Giacomini, was recently published in the *Journal of Experimental Psychology: Human Perception and Performance*, and is available online: [https://docs.google.com/file/d/0B53xVm\\_7GmcQTEhnMUNmdWhOa3c](https://docs.google.com/file/d/0B53xVm_7GmcQTEhnMUNmdWhOa3c).