Two groups of women are asked to write a math test.

One group is supported by a positive atmosphere.

The other is told that the test will determine whether they are “smart in math,” conjuring up the stereotype that — when it comes to math — men are smarter than women.

As expected, the stereotyped group did worse than the supported one.

But the University of Toronto psychology researchers went further. They asked both groups to perform a series of tasks afterwards designed to gauge aggression levels, ability to focus and powers of self-discipline.

One task involved sampling three different flavours of ice cream, each flavour piled three scoops high.

“In these follow-up tests, the women who felt discriminated against ate more than their peers in the control group,” reports assistant psychology professor Michael Inzlicht at U of T’s Scarborough campus, who led the research.

“They showed more hostility than the control group and they performed more poorly on tests that measured their cognitive skills.”

The results, to be published in the next Journal of Personality and Social Psychology, suggest that stereotyping and prejudice can negatively affect a person after the act of prejudice is over, and in indirect ways.

“The implication is that these kinds of subtle reminders about your group — maybe you’re being judged slightly differently — can have (negative) effects,” Inzlicht said in an interview.

“What happens when this person now leaves work, he gets home, all of a sudden he has chores to do, or has to meet the demands of children — would the person be less likely to be able to deal with those later situations?

“Would the person stick to their diet and eat healthy foods, or quit smoking when they want to?” Inzlicht asked rhetorically. “(Prejudice) can affect aspects of their lives that had nothing to do with the prejudice whatsoever.”

A series of four studies, conducted over two years in various formats and involving about 250 people, looked at a range of prejudice including gender, race, religion and age, he said.

“The message is that living with an identity that is somewhat denigrated can have direct impacts, but can also have indirect ones that are subtle but real,” the professor said.

“I think many people might not be aware of this, especially if they are not a member of a targeted group.”