Women are selected as business leaders less often than they should be, perhaps because they don’t express enough confidence in their abilities, new research suggests.

Men, on the other hand, are overconfident — a trait that helps them climb higher up the corporate ladder than their female colleagues.

“IT actually pays off to over-represent your abilities,” said Paola Sapienza, a professor of Finance at the Kellogg School of Management at Northwestern University.

The study appears in the Journal of Economic Behavior & Organization.

“It’s not penalized most of the time in real life. When presented with two candidates eventually one will be hired and the other will be discarded, so there will not be a lot of data to re-evaluate whether the decision was the right one,” said Sapienza.

To find out why men are selected to lead more often, the researchers asked 134 MBA students to complete a set of math problems. Both men and women scored about the same. A year later, the researchers called them back and asked them to recall their performance on the test.

Most participants overestimated their performance, which is fairly typical human behaviour. But men consistently rated their past performance about 30 per cent higher than it really was; Women consistently rated their past performance about 15 per cent higher than it actually was.

Then the researchers put subjects into groups to choose leaders to compete for a generous prize for solving the math problem.

When no cash incentives for leading were involved, groups ended up picking the most capable person to lead – whether it was a woman or a man.

But when the students were told the leaders would receive a payment simply for being chosen to lead, people competing to lead were more likely to lie in order to be chosen. The incidence of lying increased as the monetary reward for being chosen leader increased.

Although men and women lied in roughly equal numbers, women did not exaggerate their past performance to the same degree. As a result, they were 33 per cent less likely to be chosen to represent the group, even though they were at least as qualified as their male competitors.

Executives interviewing candidates for a job tend to take what they say at face value, said Sapienza.

The results of the study suggest corporate executives in charge of hiring should apply a discount factor in interviews to what men say they can accomplish and an upgrade factor to what women say they can accomplish, she said.

The research may explain why women earn 60 per cent less than their male classmates 10 years after earning an MBA, said Sapienza – women don’t get promoted as often.

The study didn’t look at why women don’t exaggerate their abilities as much as men, but Sapienza speculates that the reason could be cultural.

“Women who are very aggressive might not be perceived well. It could be part of the way we’ve been socialized.”

Although the sample size is small, it is typical for studies of this kind, according to Ernesto Reuben, assistant professor of management at Columbia Business School.

He said while the results could be extrapolated in a business context, he would hesitate to apply the same findings to all professions. People seeking a job with the government, for example, may not be motivated by the same competitive edge that leads students to pursue a business career.