Why your next job interview might be conducted by a computer

July 4 2014, by Matt Terry

McMaster researchers are trying to understand whether people will interact with computer avatars in the same manner as real humans when it comes to job and academic admissions interviews. Milena Head says you'd be surprised at how often people ascribe human-like characteristics to things like computer avatars.

Milena Head envisions a not-so-distant future in which hiring managers won't need to perform job interviews.

In fact, if her latest project is a success, your next potential employer might screen you with a [computer program](#).

Head has partnered with David Harris Smith—an assistant professor in Communications Studies and Multimedia—and Hamilton-based ProFitHR to find out if the McMaster-developed Multiple Mini Interview system works as well with computers as it does with [real people](#).

The MMI system was first used in 2002 to better evaluate candidates entering the DeGroote School of Medicine. It usually involves a series of stations at which people are observed and graded on their answers to questions or their performance during acted-out scenes.

"But that's a lengthy process, and it's a very resource-intensive process," said Head. "You've got to develop stations, train the people involved, hire actors to role-play—it's a lot to organize."

That's where Head and Harris Smith's research comes in. They want to find out if people will interact with a computer avatar in the same way they interact with other people.

If they do, a virtualized MMI system could save organizations time and money, allow candidates to be interviewed remotely and eliminate any biases that might be held by human interviewers.

"It's actually quite amazing how much we assign human-like attributes to things like computer avatars," said Head. "Research has shown that people tend to interact with simulated people the same way they interact with actual people. So we think we can recreate that face-to-face interaction within a simulated environment —if it's done right."

The six-month project, funded by an Engage grant from the Natural Sciences and Engineering Research Council, will see Head and Harris Smith develop and test two interfaces: one that is text-based, and one that is voice-based.

They'll then compare the two to see if people interact with one differently than they do the other.

Head says that if the virtual interviews are successful, they could be used by any organization that wants to evaluate someone's "critical skills."

"Things like communication skills, critical thinking skills, crisis management skills," she said. "The MMI is already used to evaluate people like emergency response workers, but really, it can be used to evaluate anyone who has to think on their feet on a daily basis."

Provided by McMaster University