Media Release

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Women and robots, *"there's just no trust"*

Women are less likely to trust robots who stare at them.

Research by Dr Chris Stanton, a roboticist at the MARCS Institute for Brain, Behaviour and Development, (Western Sydney University) investigated if the same physical elements that made humans trust one another could be applied to robotics.

What he found was; when compared to men, women demonstrated much more caution during interactions with an artificially intelligent (AI) device.

"Between humans, appearance and nonverbal communication plays a significant role in establishing rapport and influencing others. For example, leaning forward, using eye gaze, nodding, and smiling all help to build rapport," he said.

"Research has found that people are more likely to trust someone who is physically similar to themselves, so in this study, we investigated the impact of a humanoid robot's gaze upon trust."

The experiment was conducted on human participants using a computer based version of the shell game with a NAO humanoid robot as a partner, under the pretence of testing the robot's vision system.

Dr Stanton compared how three levels of robot gaze (averted, constant, and situational) impacted the likelihood of participants accepting the robot's advice when the robot and the human participant disagreed on the correct answer.

He said three different parameters of varying social interaction by the robot were tested, but only one showed significance results.

"We observed that women became noticeably uncomfortable and more guarded (during constant gaze) when the robot stared at them, but men behaved very differently, with frequent eye gaze from the robot appearing to have no effect," he said.

"In the experiment where the staring robot disagreed with the participant's response, women stuck with their gut instincts and did not change their answer despite coercion by the robot.

"These study findings are important because we have demonstrated variations in how males and females respond to and interact with AI."

Dr Stanton said research into human-machine interaction was becoming more important due to the role that AI and robotics plays in our everyday lives and the impact it will have in

the years to come.

“It is expected that robots will become increasingly common, assisting and collaborating with people in a wide variety of environments such as public spaces, the home, office, school, and in health care,” he said.

“For such human–robot collaborations to be successful, social robots must be capable of fostering

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To find out more, read the published journal article at:
https://link.springer.com/article/10.1007/s12369-017-0422-y?wt_mc=Internal.Event.1.SEM.ArticleAuthorOnlineFirst

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