Female-Name Chat Users Get 25 Times More Malicious Messages

May 9 2006

A study by the University of Maryland's A. James Clark School of Engineering found that chat room participants with female usernames received 25 times more threatening and/or sexually explicit private messages than those with male or ambiguous usernames.

Female usernames, on average, received 163 malicious private messages a day in the study, conducted by Michel Cukier, assistant professor in the Center for Risk and Reliability in the Clark School's Department of Mechanical Engineering, and an affiliate of the university's Institute for Systems Research, and sophomore computer engineering student Robert Meyer.

The study focused on internet relay chat or IRC chat rooms, which are among the most popular chat services but offer widely varying levels of user security. The researchers logged into various chatrooms under female, male and ambiguous usernames, counted the number of times they were contacted and tracked the contents of those messages. Their results will be published in the proceedings of the Institute of Electronics and Electrical Engineers International (IEEE) Conference on Dependable Systems and Networks (DSN '06) in June.

"Some messages to female usernames were innocuous, while others were sexually explicit or threatening," Meyer says. Harmless messages included "helo" and "care 2 intro?" Tamer examples of malicious messages included suggestive questions such as,"feeling horney?"and requests for "intimate services."

The researchers also determined that simulated users or "bots" are not behind most of the malicious messages. "The extra attention the female usernames received and the nature of the messages indicate that male, human users specifically targeted female users," Cukier said.

"Parents should consider alerting their children to these risks, and advising young people to create gender-free or ambiguous usernames. Kids can still exercise plenty of creativity and self-expression without divulging their gender," Cukier says.

"Gender stereotypes and gender-targeted messages are very prevalent in internet chat rooms. Some people use the protected anonymity of the Internet to send provocative messages, often basing their assumptions about the recipient of the messages on very little information," adds Melanie Killen, professor of human development in the university's College of Education and associate director of the Center for Children, Relationships and Culture. "Parents should be very concerned, but they are closing their eyes to it because they don't know how to deal with it."

Killen advises parents to start talking with their kids around age 10. She urges parents not to use heavy-handed warnings or to ban their children from chatting online. Both are strategies that the child might ignore or that could make them even more likely to explore.

"Sit down and have conversations on a regular basis on what they're doing, what's involved," she says. "A lot of kids are very naïve about this and feel it won't happen to them."

Though female users are targeted more often, this doesn't mean boys won't be exposed to the same disturbing content, Killen says.

"Boys can be preyed upon too. And boys could be the ones doing it and thinking it's not harmful," she says.