Anonymous browsing hinders online dating signals

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Big data and the growing popularity of online dating sites may be reshaping a fundamental human activity: finding a mate, or at least a date. Yet a new study in *Management Science* finds that certain longstanding social norms persist, even online.

In a large-scale experiment conducted through a major North American online dating website, a team of management scholars from Canada, the U.S. and Taiwan examined the impact of a premium feature: anonymous browsing. Out of 100,000 randomly selected new users, 50,000 were given free access to the feature for a month, enabling them to view profiles of other users without leaving telltale digital traces.

The researchers expected the anonymity feature to lower social inhibitions—and apparently it did. Compared to the control group, users with anonymous browsing viewed more profiles. They were also more likely to check out potential same-sex and interracial matches.

Surprisingly, however, users who browsed anonymously also wound up with fewer matches (defined as a sequence of at least three messages exchanged between users) than their non-anonymous counterparts. This was especially true for female users: those with anonymous browsing wound up with an average of 14% fewer matches. Why?

Women don't like to send personal messages to initiate contact, explains Jui Ramaprasad, an assistant professor of information systems at McGill University's Desautels Faculty of Management. In other words, she says, "We still see that women don't make the first move." Instead, they tend to send what the researchers call a "weak signal."

"Weak signaling is the ability to visit, or 'check out,' a potential mate's profile so the potential mate knows the focal user visited," according to the study. "The offline 'flirting' equivalents, at best, would be a suggestive look or a preening bodily gesture such as a hair toss to one side or an over-the-shoulder glance, each subject to myriad interpretations and possible misinterpretations contingent on the perceptiveness of the players involved. Much less ambiguity exists in the online environment if the focal user views another user's profile and leaves a visible train in his 'Recent Visitors' list."

Men often take the cue. "Men send four times the number of messages that women do," says co-author Akhmed Umyarov, an assistant professor at the University of Minnesota's Carlson School of Management. "So the anonymity feature doesn't change things so much for men."

Implications beyond online dating

Experiments of this sort could be used in a range of online-matching platforms to help understand how to improve the consumer experience - though it's important that the experiments be done ethically, the researchers say.

"Even though people are willing to pay to become anonymous in online dating sites, we find that the feature is detrimental to the average users," says Professor Ravi Bapna, co-author and the Carlson Chair in Business Analytics and Information Systems at Minnesota. "Professional social networks, such as LinkedIn, also offer different levels of anonymity, but user behavior and the underlying psychology in these settings is very different from that of romantic social networks."

As with many academic research projects, the idea for this experiment stemmed partly from serendipity.

"I happened to know a senior guy at an online dating site," Ramaprasad explains. "Since he knew that I studied online behavior, he suggested, 'Why don't you study this?'" The site, referred to in the study by the fictitious name of monCherie.com, is one of the largest online dating websites in North America.

The study could lay the groundwork for further academic analysis of online dating sites. "We expect future research to examine in more depth the issue of match quality and long-term outcomes as they relate to marriage, happiness, long-term relationships, and divorce," the researchers conclude.

More information: "One-Way Mirrors and Weak-Signaling in Online Dating: A Randomized Field Experiment," Ravi Bapna, Jui Ramaprasad, Galit Shmueli, Akhmed Umyarov. *Management Science*, published online

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