

# Access to IT helps female researchers more than males

February 9 2011

---

Access to information technology benefits female research scientists more than their male counterparts, increasing research productivity and collaboration, according to a new study co-authored by Assistant Professor Waverly Ding of the University of California, Berkeley's Haas School of Business.

The study concludes that IT is an "equalizing force" for researchers and suggests innovations in IT may contribute to scientific productivity.

Women researchers at non-elite universities in particular increased their publication counts by 18 percent when their institutions provided IT as a communications tool, according to the study, published in *Management Science* (September 2010). "I'm not saying IT isn't helping men; it's positive for both," says Ding. "However, women gain more from IT advancement in universities than men do."

The co-authors of the study, titled "The Impact of [Information Technology](#) on Academic Scientists' Productivity and Collaboration Patterns," include Sharon Levin and Anne Winkler of the University of Missouri-St. Louis and Paula Stephan of Georgia State University.

Their study focused on more than 4,000 researchers in the life sciences from more than 150 universities during the past 25 years. Because the Internet was not common or widespread until the mid-1990s, researchers studied the availability of BITNET at a scientist's institution. BITNET was the embryonic form of today's Internet and used primarily at

academic institutions to link scientists across universities. The goal was to foster communication and collaboration, but it did not consist of email or any search engines, and was gradually replaced by the Internet. The study measured productivity by changes in a scientist's publication count – the number of articles published in peer-reviewed journals -- and the quality of the publications.

After a university installed the BITNET system, women's publications increased 19 percent while there was no statistically significant gain in access to BITNET for men. Furthermore, women gained 27 percent in obtaining new co-authors while men only gained 13 percent.

At lower-ranked universities, researchers have fewer colleagues and less diversity in terms of their research areas, making collaboration more difficult.

"IT gives [researchers](#) a tool so they may connect with colleagues at other institutions and collaborate to obtain cutting-edge knowledge," explains Ding.

She adds, "Furthermore, the research supports the need for more collaboration, being open, and increasing the extensiveness and diversity of one's research network – that's the lesson of this study."

Provided by University of California - Berkeley

Citation: Access to IT helps female researchers more than males (2011, February 9) retrieved 3 May 2024 from <https://phys.org/news/2011-02-access-female-males.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--