Why aren't product designers considering activity trackers for older adults?

June 11 2014

Commercially available activity-monitoring apps, Web sites, and wearable devices allow for easy self-management of health and wellness. This technology may be particularly helpful for older adults, who can improve their cognitive function through proper diet and exercise. Despite tracking monitors' growing popularity and potential benefits, product designers rarely consider those over 65 to be a viable user group, and new human factors/ergonomics research indicates that the technology presents several usability challenges for this population.

"Many older adults have chronic conditions such as diabetes and hypertension that require them to self-manage their health," said Kimberly Preusse, coauthor of "Activity Monitoring Technologies and Older Adult Users: Heuristic Analysis and Usability Assessment" and Georgia Tech engineering psychology graduate student. "Research has shown that they want to track their diet and exercise, but most don't use activity-monitoring technologies to do so."

In research presented at the 2014 International Symposium on Human Factors and Ergonomics in Health Care in April, authors Preusse, Tracy Mitzner, Cara Fausset, and Wendy Rogers designed a study assessing the usability of two popular Web-based and wearable activity trackers. Older adult participants were asked to track their diet and exercise over two weeks and report on usability issues they experienced, as well as their attitudes toward the technology. The authors also conducted a separate analysis of both trackers to uncover any design issues that could be problematic.
The researchers found a number of usability problems, including low color contrast between icons and the background screen, small fonts, and inconsistent navigation bars across Web sites. Study participants perceived the technology to be inaccurate when tracking step counts and sleep patterns. Many of them also reported difficulty remembering to log their information and use the device, which could be mitigated by more prominent reminder options.

"Activity-monitoring technologies can make tracking diet and exercise easier because they gather some data automatically and display trends over time," said Preusse. "Companies should market their products directly to older adult users so that they understand how the technology can be beneficial in managing their health."

Provided by Human Factors and Ergonomics Society


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.