Surfing the net helps your aging brain

healthday Reporter

Surfing the Internet just might be a way to preserve your mental skills as you age. Researchers found that **older adults who started browsing the Web experienced improved brain function after only a few days**. "You can teach an old brain new technology tricks," said Dr. Gary Small, a psychiatry professor at the Semel Institute for Neuroscience and Human Behavior at the University of California, Los Angeles, and the author of *iBrain*. With people who had little Internet experience, "we found that after just a week of practice, there was a much greater extent of activity particularly in the areas of the brain that make decisions, the thinking brain -- which makes sense because, when you're searching online, you're making a lot of decisions," he said. "It's interactive."

Small is co-author of the research, which was scheduled to be presented Monday in Chicago at the Society for Neuroscience annual meeting. "This makes intuitive sense, that getting on the Internet and exploring and getting new information and learning would help," said Paul Sanberg, director of the University of South Florida Center of Excellence for Aging and Brain Repair in Tampa. "It supports the value of exploring the Internet for the elderly."

Most experts now advocate a "use-it-or-lose- it" approach to mental functioning. "We found a number of years ago that **people who engaged in cognitive activities had better functioning and perspective than those who did not**," said Dr. Richard Lipton, a professor of neurology and epidemiology at Albert Einstein College of Medicine in New York City and director of the Einstein Aging Study. "Our study is often referenced as the crossword-puzzle study -- that **doing puzzles, writing for pleasure, playing chess and engaging in a broader array of cognitive activities seem to protect against age-related decline in cognitive function** and also dementia."

The new study takes the use-it-or-lose- it concept into the 21st century. For the research, 24 neurologically normal adults, aged 55 to 78, were asked to surf the Internet while hooked up to an MRI machine. Before the study began, half the participants had used the Internet daily, and the other half had little experience with it. After an initial MRI scan, the participants were instructed to do Internet searches for an hour on each of seven days in the next two weeks. They then returned to the clinic for more brain scans. "At baseline, those with prior Internet experience showed a much greater extent of brain activation," Small said.

After at-home practice, however, those who had just been introduced to the Internet were catching up to those who were old hands, the study found. "This is a demonstration that, over a relatively short period of time, patterns of brain activation while engaging in cognitive activities change," Lipton said. "That is at least a first step toward gaining insight into the mechanisms that might allow cognitive engagement to influence brain function."

But, Small said, **beware how you use the Internet**. "You can exercise your mind by using the Internet, but it depends on how it's used," he explained. "If you get hooked on gambling or eBay shopping, that may not be positive."

More information

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