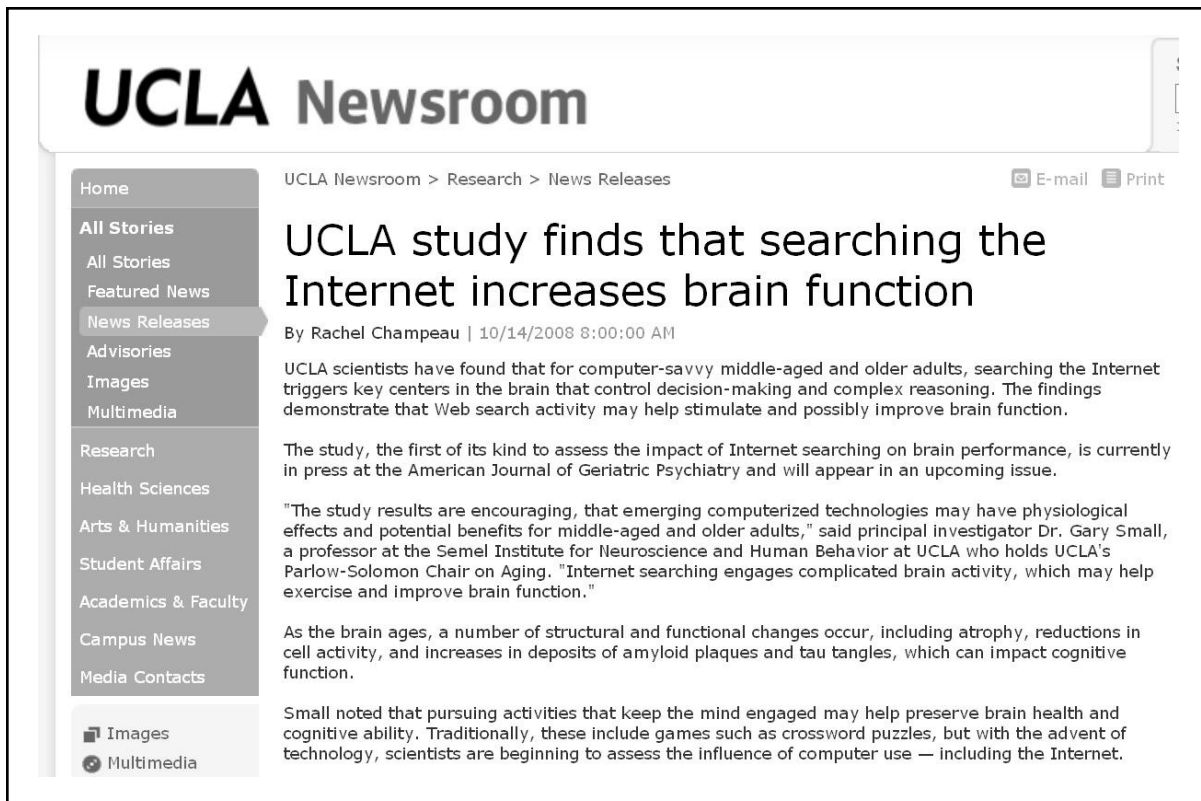


Chapter 31

Searching the Internet Increases Brain Function!

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UCLA study finds that searching the Internet increases brain function

By Rachel Champeau | 10/14/2008 8:00:00 AM

UCLA scientists have found that for computer-savvy middle-aged and older adults, searching the Internet triggers key centers in the brain that control decision-making and complex reasoning. The findings demonstrate that Web search activity may help stimulate and possibly improve brain function.

The study, the first of its kind to assess the impact of Internet searching on brain performance, is currently in press at the *American Journal of Geriatric Psychiatry* and will appear in an upcoming issue.

"The study results are encouraging, that emerging computerized technologies may have physiological effects and potential benefits for middle-aged and older adults," said principal investigator Dr. Gary Small, a professor at the Semel Institute for Neuroscience and Human Behavior at UCLA who holds UCLA's Parlow-Solomon Chair on Aging. "Internet searching engages complicated brain activity, which may help exercise and improve brain function."

As the brain ages, a number of structural and functional changes occur, including atrophy, reductions in cell activity, and increases in deposits of amyloid plaques and tau tangles, which can impact cognitive function.

Small noted that pursuing activities that keep the mind engaged may help preserve brain health and cognitive ability. Traditionally, these include games such as crossword puzzles, but with the advent of technology, scientists are beginning to assess the influence of computer use — including the Internet.

Almost every week, it seems, we read a new study about the benefits of keeping our minds active. A recent one is from the *UCLA Newsroom* with the headline, "UCLA Study Finds that Searching the Internet Increases Brain Function."

The article says that for older adults, "searching the Internet triggers key centers in the brain that control decision making and complex reasoning. The findings demonstrate that Web search activity may help stimulate and possibly improve brain function."

These studies have us thinking about older audiences. Our company presents computer and Internet topics in seminars and classes — sometimes to those over age 50. We do our best to teach in a non-technical, practical, and entertaining way (no matter what the age of the audience), but we do not teach to a certain type of audience or age of adults. We just teach adults. Still, we hear that older audiences aren't interested in, or aren't able to learn about, challenging topics such as computers and the Internet. Hogwash.

Let's stop for a minute and look more deeply at this "over-50" group. They vote more, read more, own more, invest more, and buy more than any other age group. They are the fastest growing sector of the computer-literate market, and, once connected, they surf the Internet more. In fact, those aged 50 to 64 are more likely to have Internet access at both home and work than those in the 18-to-29 age group! It's crucial to know these figures because it helps us realize that older audiences are empowered, not enfeebled.

Older audiences are also a practical group. They want to take something home from a learning event — something for others. In a marketing study called *Rocking the Ages*, the authors wrote that for older Americans, "Doing something on behalf of others will also continue to be important. This is especially true as it ties into family." Older adults want to make a contribution. Maybe that's what makes them such an attractive audience. They are not just looking for practical lessons that will help their own lives. They are also looking for practical ways to help their friends and loved ones.

And how about this? Even if stimulating our brains wasn't so good for us, Dr. Richard Restak, author of *Mozart's Brain and the Fighter Pilot*, has pointed out, "The healthy exercise of our brain's inherent powers is highly pleasurable." Hey, news flash, folks: learning is just plain fun!

So, if you are an older adult and you attend learning events that truly challenge your brain, go ahead and congratulate yourself. You are doing four great things for yourself. First, it means you embrace the concept of empowerment — as opposed to "enfeeblement." Second, you give yourself something to challenge your brain, which now appears to stimulate and improve brain function. Third, you are part of the group most likely to carry the message to others, to enrich them as well. And finally, you are allowing yourself to do one of the most enjoyable things in life: learn.

So, now it's time to learn something you might not have known about the Internet. Remember, this is good for you!

"Just Google It?"

Here's a remarkable statistic. Nine out of ten people are satisfied with their ability to search the Internet. The Pew Research Group's Internet & American Life Project reports, "[Ninety-two percent] of those who use search engines say they are confident about their searching abilities," with over half of them, 52 percent, saying they're "very confident."

What an amazing number! Do you think 92 percent of Americans are satisfied with their looks? Are 92 percent of Americans pretty confident that they weigh what they should or make as much money as they should? As Carolyn Myss, the author of the book, *Anatomy of the Spirit*, has said, “Americans have managed to make lack of self-esteem a national malady.”

Americans are generally lacking in self-esteem in almost every category of their lives — except, it would seem, their ability to search the Internet. This is surprising, considering how new the Internet is — and how enormous it is. Add to that the complexity of the technology involved, and it’s astounding how anyone can believe they know all they need to know in this area.

But you are still reading — and that means you’re among the 8 percent who believe there is more to learn. For you, here are a few tips on how to do better searches, save time, and have fun doing it.

Tip #1 — Bartlett Never Had It this Good.

Always use quotation marks around words that belong together. This is particularly useful if you can only remember a line or two of a song, a poem or a joke. For example, “Once upon a midnight dreary,” “St. Agnes Eve – ah bitter chill it was,” or “I was stranded in the jungle.” Try this at home — you’ll win a lot of those dinner table bets.

Tip #2 — Pictures of Oprah or News of Oprah?

Google can search many things besides websites. One of the most useful is to look for photos. Just click the “Images” tab, and Google will search for pictures of anything you want — “Brazilian rain forests,” “Derek Jeter,” even the “Hope Diamond.” (Great, glad to see you’re using Tip #1 already!) Similarly, if you’re looking for news articles on a subject, don’t search the entire web; just click the “News” tab to restrict your results to news about the “Brazilian rain forests,” “Derek Jeter,” or the “Hope Diamond.”

Tip #3 — Triple Google Latte (Half-Decaf and Hold the Whipped Cream, Please).

Want to keep from seeing explicit pictures? Need Google to talk to you in French? Get Google to work the way you want it to work — on the “Preferences” tab. Google lets you tell it lots of other things — by far, more things than you can ever tell your kids — and it will listen! The “Preferences” tab is on the Google home page. Give it a look.

Tip #4 — Just Your News — Sent to You.

Who wants to spend more time on their computer these days? Stop following your nose for hours and hours on end, looking for the latest information. Instead, sign up for Google’s “News Alerts.” You can have alerts sent to you on everything from the stocks you own to the latest news about global warming to your favorite soap opera stars. Save time by letting Google send you just the topics you want.

Tip #5 — It's a Calculator, It's a Phone Directory, It's SuperGoogle!

This is sort of scary, but just type in a telephone number and up comes the name and address of the person who owns that number. You can also type in a stock symbol and you'll get its up-to-the-minute price. The list goes on and on. For instance, type in your UPS shipment number (you don't even have to type in "UPS" because somehow, it just knows). By the way, when you do type in your UPS tracking number, sure enough, it will tell you that it's been held up in a snowstorm in Detroit.

Tip #6 — Cache Is the Secret of Success.

Ever get those annoying messages that say "Page Not Found" when you go to a Google result? Use the "back button" and click on the word "Cached." Like magic, the website you wanted will appear (actually a picture of the site, but let's not argue) and it will even highlight (in different colors!) each of your search terms. Some of our friends use "Cache" all the time just because of the highlighted words.

Tip #7 — It's All in How You Say It.

Hang on to your hat for this one. If you are new to All Things Google, you might want to skip this paragraph. If you're a Google veteran, this one's for you. Let's say you are looking for information about "fixed annuities." Add the word "site:" to zero in on the kind of information you need. If you type "fixed annuities," you will have over 230,000 results — mostly from sites that want to sell you stuff. However, if you type in:

"fixed annuities" site:edu

you'll get much more targeted information (only from university and educational sites) — and leave most of the sales guys back at the station, where they belong. We have to keep this short here, but if you want to avoid looking for every possible mention of your search term (*i.e.*, "Adlai Stevenson") and are only looking for sites that deal with Adlai, do your search by typing:

intitle:"Adlai Stevenson"

These are just a few of many terms you can use to narrow down your search results and get exactly the kind of information you need.

Tip #8 — Digital Photography Without Going to the Madhouse.

Google offers photo editing software that is what every software program in the world should be: free and easy to use. Picasa, Google's photo program, does a lot more than just help you edit your photos. At the click of your mouse, it will run a slideshow of your trip to Bali, send (and size!) photos of Bali to Aunt Jenny, *and* print your pictures any way you like them. You find it under the "More" tab — which is one of those links at the top left of Google's impossibly simple home page — and then choosing "Photos" from the list.

**Last and Most Important Tip —
You've Got A Long Way to Go, Baby!**

We've told you just a few of the hundreds of things Google can do. Amazing, isn't it? However, there are a few things Google can't do. The next time you hear someone tell you that they can find everything on the Internet by just typing a few words into Google, tell them about another part of that Pew Internet report. The fact is, most of the Internet is not available through Google. The Pew study said it this way:

Finally, there are billions of web pages that users of the popular search engines have no access to. In fact, despite what feels like a veritable and ever-growing glut of information, only a small fraction of existing web pages are actually indexed by the popular engines. The rest are hidden on the "invisible web."

And, now you know how to search and learn more about the "invisible web," the "deep web," or the "hidden Internet." Go search for them. The beauty is that there is so much to learn — more to learn about Google, and much more to learn about the Internet. But, since you're part of the 8 percent, you already knew that.

