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Folks who multitask the most aren't so good at it, study says

By **Randolph E. Schmid**

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WASHINGTON — The people who multitask the most are the ones who are worst at it.

That's the surprising conclusion of researchers at Stanford University, who found multitaskers are more easily distracted and less able to ignore irrelevant information than people who do less multitasking.

"The huge finding is: The more media people use, the worse they are at using any media. We were totally shocked," Clifford Nass, a professor at Stanford's communications department, said in a telephone interview.

The researchers studied 262 college undergraduates, dividing them into high- and low-multitasking groups and comparing such things as memory, ability to switch from one task to another and being able to focus on a task. Their findings are reported in today's edition of Proceedings of the National Academy of Sciences.

When it came to such essential abilities, people who did a lot of multitasking didn't score as well as others, Nass said.

Still to be answered is why the folks who are worst at multitasking are the ones who are doing it the most.

It's sort of a chicken-or-egg question.

"Is multitasking causing them to be lousy at multitasking, or is their lousiness at multitasking causing them to be multitaskers?" Nass wondered. "Is it born or learned?"

In a society that seems to encourage more and more multitasking, the findings have social implications, Nass observed. Multitasking already is blamed for car crashes, and several states restrict the use of cell phones while driving. Lawyers or advertisers can try to use irrelevant information to distract and refocus people to influence their decisions.

In the study, the researchers first had to figure out who were the heavy multitaskers and who were the light ones. They gave the students a form listing a variety of media such as print, television, computer-based video, music, computer games, telephone voice or text, and so forth.

The students were asked, for each form of media, which other forms they used at the same time always, often, sometimes or never.

The result ranged from an average of about 1.5 media items at the low end to more than four among heavy multitaskers.

Then they tested the abilities of students in the various groups.

For example, ability to ignore irrelevant information was tested by showing them a group of red and blue rectangles, blanking them out, and then showing them again and asking if any of the red ones had moved.

The test required ignoring the blue rectangles. The researchers thought people who do a lot of multitasking would be better at it.

"But they're not. They're worse. They're much worse," Nass said. The high media multi-taskers couldn't ignore the blue rectangles. "They couldn't ignore stuff that doesn't matter. They love stuff that doesn't matter," he said.

Perhaps the multitaskers can take in the information and organize it better? Nope.

"They are worse at that, too," Nass said.

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"So then we thought, 'OK, maybe they have bigger memories.' They don't. They were equal" with the low multitaskers, he added.

Finally, they tested for the ability to switch from one task to another by classifying a letter as a vowel or consonant, or a number as even or odd. The high multitaskers took longer to make the switch from one task to the other.

This particularly surprised the researchers, considering the need to switch from one thing to another in multitasking.

"They couldn't help thinking about the task they weren't doing," lead author Eyal Ophir said. "The high multitaskers are always drawing from all the information in front of them. They can't keep things separate in their minds."

The next step is to look into what multitaskers are good at and see if the difference between high and low multitaskers is one of "exploring" versus "exploiting" information.

"High multitaskers just love more and more information. Their greatest thrill is to get more," he said. On the other hand, "Exploiters like to think about the information they already have."

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