

[Back to Article](#)[Click to Print](#)

Friday, Aug. 22, 2008

## Gut Decisions May Not Be Smart

By Deirdre Van Dyk

If you have ever struggled with a difficult decision — new job vs. new boyfriend, sports car vs. minivan, read the book vs. see the movie — you have likely also been offered a heap of decision-making wisdom. Make a list of pros and cons. Go with your gut. Sleep on it.

It was this last bit of advice — sleep on it — espoused in a paper by Dutch researchers and published in the journal *Science* in 2006, that really irked Ben Newell, a researcher himself at the University of New South Wales in Australia. That paper suggested that people might be better off relying on unconscious deliberation to make complex decisions — despite an abundance of scientific evidence to the contrary — given that the human brain can reasonably only focus on a few things at a time. Once people have all the necessary information to make a decision, the paper found, too much conscious deliberation could lead to unnecessary attention given to extraneous factors.

Newell's answer to the *Science* paper is called "Think, Blink or Sleep on It? The Impact of Modes of Thought on Complex Decision Making," co-authored with colleagues at the University of New South Wales and the University of Essex in England, and published in the most recent issue of the *Quarterly Journal of Experimental Psychology*. It took four experiments to make the point, but Newell's conclusion is that unconscious deliberation is no more effective than conscious deliberation — using lists of pros vs. cons, for example — for making complex decisions, and that if anything, people who deliberate methodically are better off. "If you have to make decisions, you have to do your homework," says Newell. "There is no magic unconscious."

In Newell's first experiment, 71 students were asked to choose an apartment from a list of four, each with its own specific pros and cons — nasty neighbors but a friendly roommate, a low-crime neighborhood but expensive rent, in-house gym but a small living space. Only one apartment, Flat B, had an equally weighted mix of pros and cons, thus representing the best choice. (On balance, the other apartments' drawbacks outweighed their benefits; that is, even when an apartment description had a longer list of positive attributes, those pros were lightweight and insignificant compared to the shorter list of cons.)

The students were divided into three groups: the first was asked to choose one of the apartments immediately after getting information about them; the second group was given four minutes to deliberate before deciding; and the third group was asked to solve anagrams for four minutes before making their choice. (The idea was to distract the students' conscious mind, and allow their unconscious to tackle the apartment decision.) The researchers

Copyright © 2008 Time Inc. All rights reserved. Reproduction in whole or in part without permission is prohibited.

found that in every case, the students were equally likely to choose Flat B, the only unit with an equal balance of pros and cons.

Newell had expected to replicate the Dutch results in the experiment; that is, he thought the anagram-solving group would be more likely than the others to go with Flat B. When that didn't happen, he redesigned the experiment, giving an additional four minutes of decision-making time to the conscious and unconscious deliberators. But, once again, he got the same result — all the students were equally likely to choose the best apartment.

Persevering, in a third experiment Newell decided to re-stage the original Dutch study as closely as possible; that experiment had involved choosing among four cars, instead of four apartments. Newell asked 90 students to choose their preference from four fictional cars, which each varied on 12 attributes, such as gas mileage, handling and whether it had a sunroof. Again, one car of the bunch had an equally weighted list of pros and cons. This time unconscious thinkers actually did worse — they were less likely to pick the best car — than conscious thinkers.

"I was flummoxed," says Newell, "I did some research to try to figure out why the Dutch had been able to see differences we hadn't." Theorizing that perhaps the students' decisions could be influenced by the order in which the information was presented to them, Newell set about designing a fourth, and final, experiment.

This time he asked 119 students to choose between only two cars, which were equally attractive. Both cars had pros and cons, but neither car was measurably better than the other; the key was the order in which students received the information. Students were again divided into three groups: the instant deciders, the conscious deliberators and the unconscious deliberators. These groups were then each subdivided into two groups. One received positive information about one car or the other first; one received the positive information last.

This time, researchers found a significant difference in who picked which car. Students in the unconscious deliberation group who heard positive attributes after the negative ones, tended to pick the car they heard about last. In the conscious deliberation group, however, the order in which information was presented had no effect on which car students chose. When people are distracted, they tend to forget what they've just been told, says Newell. When they try to recall the information, the thing they remember best is the last positive information they heard — a phenomenon that researchers call the "recency effect" (and one that advertisers have found very useful). Newell thinks a similar factor may have been what influenced the "sleep on it" results in the Dutch study, but because he doesn't know what order the Dutch subjects were given their information, he can't say for certain. "Both cars in the experiment were equal, so I would expect roughly equal numbers of the subjects to choose each car," says Newell.

Newell admits that his own experiments have their limitations. Using hypothetical scenarios about fictional apartments and cars can tell researchers only so much. "People are not really engaging in these decisions," Newell says. Even so, researchers understand the pathways in which conscious decisions are made, but have no way of understanding the unconscious, so he says, "It's overly bold to recommend that as a way of making decisions."

Of course, not every decision requires you to write a dissertation about its options. Making a gut decision is a perfectly respectable way to, say, choose your lunch. There are other decisions, however, that feel like gut decisions — ones we make quickly and without much apparent conscious thought — that may involve more

higher-order thinking, or experience, than we realize. Newell offers the example of a doctor he knows, who insists he can make patients' diagnoses based on gut decisions. "But that doctor has 20 to 30 years of experience, and has in the past employed deliberate decision-making. So maybe over time, these decisions become automated," says Newell. "Going with your 'gut' may be right when you're an expert. For example, maybe choosing lunch every day is easy because we do it every day. But we don't move every day, so when making a choice about where to live, we have no expertise."

"All I'm saying is if you've got a tough decision, thinking about it is better than hoping some magical unconscious thing will solve it for you," he says. Newell himself has to make a big decision now — choosing a place for his family to live. He's already made his list of pros and cons.

 Click to Print

**Find this article at:**

<http://www.time.com/time/health/article/0,8599,1835431,00.html>

---