

Don't Wait Till Tomorrow

A researcher comes up with the formula for procrastination; plus, mind images as a marketing tool and a donation game measures behavior

by [Francesca Di Meglio](#)

It's no secret that many people—with business students being no exception—love to put off until tomorrow what they can do today. About 95% of people procrastinate at least occasionally, according to B-school professor Piers Steel at the University of Calgary. For about 15% to 20% of the population, procrastination is a way of life and could be problematic. But learning about the root of procrastination, and having some willpower, can help.

Steel, an associate professor at Calgary's Haskayne School of Business, is a leading researcher in the study of procrastination. He found that people are more likely to avoid an assignment if their expectation of being able to finish it is low and they have little self-confidence and lots of distractions, such as e-mail constantly popping up on the computer screen or readily available temptations (think Solitaire).

In Steel's latest research, recently published in the American Psychological Association's *Psychological Bulletin*, he explained procrastination with a mathematical formula that defines what he calls the Temporal Motivational Theory. The formula is: $Utility = E \times V / (\Gamma D)$, where Utility means your desire to perform a task; E is the expectation of completing a task; V is the value of finishing; the Greek letter gamma, Γ , is sensitivity to delay; and D is delay, or time until finish and rewards are realized.

Being able to evaluate the gains and losses of procrastinating with a mathematical formula makes it easier for people to see the economic downside of putting off work and obligations.

In fact, Steel calculates that if every worker wastes about 20%, or two hours, of each day procrastinating, the corporate world in North America could lose up to \$800 billion as a consequence. That's why it's in everyone's best interest to put off procrastinating and get to work. Steel suggests avoiding the distractions. For instance, close e-mail while working. When he wants to avoid procrastinating, he puts off one big project to work on another. Juggling assignments often forces people to stay focused. (For more tips on avoiding procrastination, see [BusinessWeek.com](#), 1/31/07, "[Don't Let Procrastination Drag You Down.](#)")

For Steel, his subject matter isn't foreign territory. "Some people say research is me-search," he says. "I'm a procrastinator." In fact, it took him about a decade to publish this batch of research. And Steel is starting to work on a book for Random House about procrastination—but he admits he probably won't meet the current deadline.

From MBAs to Mind Readers

In the near future, MBAs will likely be responsible for reading people's minds in addition to the usual formulas and frameworks they already have to know. Thanks to fMRI (functional magnetic resonance imaging) technology, a machine already used in medicine that allows researchers to track and analyze brain activity when people are making decisions, businesspeople and educators are better understanding everything from how

consumers decide what to buy to how managers confront ethical dilemmas.

Recently, researchers from Carnegie Mellon, Stanford, and the Massachusetts Institute of Technology used fMRI technology to confirm the belief that spending too much is a cause of pain. They found that when consumers saw a price and then had lots of activity in the insula, the area of the brain associated with pain (for example, bad odors or closing a drawer on your thumb), people were less likely to make a purchase. On the other hand, if activity increased in the brain's pleasure center, the person was more likely to buy.

For now, this research, which was published in early January in *Neuron*, is pure science because there are no corporate sponsors. But companies will want to make spending less painful, says Scott Rick, a PhD candidate in the Social & Decision Sciences Dept. at Carnegie Mellon and a participating researcher. He adds that being able to pay by credit (and without a signature in some cases) is a step closer to a more pleasant spending experience. He imagines there will be more of these alternatives in the future, and marketers are already starting to use the fMRI technology to better focus ad campaigns and sales tactics (see BusinessWeek.com, 1/22/07, "[If I Only Had a Brain Scan](#)").

The fMRI technology is also being used to understand human reaction to ethical debates. The business and medical schools at Emory University in Atlanta teamed up to study what part of the brain assesses ethical questions. The results will appear in an upcoming issue of *Neuropsychologia*, a British science journal. Using fMRI, researchers found that executives activated the part of the brain associated with empathy and memory when considering an ethical problem, but reserved the part of their brain designated for assessing risk and probability for strategic decisions.

The discovery has already led Diana Robertson, lead author of the findings and professor of organization and management at Emory's [Goizueta Business School](#), to modify the way she teaches ethics to business students. Now, she emphasizes falling back on your own experiences to make ethical choices.

The Giving Game

Can a B-school laboratory game help solve the seemingly intractable conflict between the Israelis and Palestinians? It's a possibility, says Columbia University researcher Raymond Fisman.

Fisman, associate professor of finance and economics at [Columbia's Graduate School of Business](#), and colleagues at Berkeley and Yale have been studying patterns of giving using a computer game that looks at ways givers and recipients react to different incentives. In the game, participants had 50 charts depicting donation budgets with different scenarios for how the funds would be distributed. Players had to split the funds for each budget between themselves and another participant. In some rounds, the receiver would get more than \$1 for each dollar donated, so it paid to be generous. In others, giving was expensive, so players might consider keeping more money to maximize the pie.

Efficiency won out over equality most of the time. That means people tended to keep more for themselves when giving was expensive rather than making sure the money was doled out evenly. Fisman says he was most surprised by the fact that people were internally consistent in their giving decisions. "It's a fundamentally good way of understanding human psychology," says Fisman.

A group of Palestinians and Israelis played the game as a means of seeing how people on different sides of an issue would react to sharing and distributing funds. The results of that study are expected to be published at a later date, and Fisman didn't want to discuss any preliminary findings. But it could be that a computer game will

give some insight into a serious real-world problem.

[Di Meglio](#) is a reporter for *BusinessWeek.com* in Fort Lee, N.J.

Copyright 2000-2009 by The McGraw-Hill Companies Inc. All rights reserved.

The McGraw-Hill Companies