

The Business Brain

## **When older is not always wiser**

Sunday, November 28, 2010

**SUSAN PINKER**

You may think your nest egg shrank because of the subprime mortgage disaster. Or maybe it was the general myopia, or a lack of oversight, in the financial industry. But have you considered that your investments took a hit because your portfolio manager is getting a little long in the tooth?

A recent study of the "suboptimal risks" taken by aging investors suggests as much. Led by Stanford University psychologist Gregory Samanez-Larkin, the research team wanted to test whether a long-standing stereotype holds up to scrutiny: Does risk aversion increase with age?

To answer that question, researchers invited 110 healthy volunteers between the ages of 19 and 85 to play an investment game. Subjects played the game while they were inside a medical scanner that would track their brain activity while they made financial decisions.

All participants were asked to choose between two stocks and a bond, and were then given immediate feedback on the outcome of their choices, as compared with an idealized, rational investor. The subjects could then use that information to adjust their stock picks on the next round – in essence, mimicking market dynamism.

The aim was to see which age group's decisions would be the most rational, resulting in the most valuable portfolio at the end of play. Would it be the young whippersnappers, or the financially well-seasoned?

"The youngest people perform like the most rational investors," said Dr. Samanez-Larkin. In other words, our investment mistakes tend to increase as we age.

But it wasn't because of the stereotypical reason – that people become risk-averse as they age. Rather, when investors watch the markets closely and constantly revise their views, the older the person is, the more confused he or she becomes about which stock is the best choice.

"When older adults have to choose a safe asset, they're just as good as young investors," Dr. Samanez-Larkin noted. "But when they have to choose between two risky assets – when they have to learn from experience – they make more errors."

Why might this happen? Shouldn't years of experience lead to shrewder financial judgments?

Apparently not, judging by what the researchers found in the activity in the nucleus accumbens, one of the neural regions that handles probabilities. This area, a collection of neurons buried deep in the middle of the brain, registers our appetite for pleasure and reward (and its first cousin, addiction.) It's also where we assess novel information while making financial decisions.

When studying the brain scans of the younger and middle-aged subjects, the researchers could track big bursts of activity in the nucleus accumbens that were directly linked to salient new bits of financial information.

But in the scans of older subjects (aged 65-85), it was harder to connect peaks of neural activity, which should have coincided with novel information, and general neural noise.

"In older adults the signal is more unstable. It just jumps around a lot more, which correlates with errors choosing stocks," Dr. Samanez-Larkin explained. "And when there's more noise in that signal, there was also less precision, less accuracy, in financial decision making."

Older investors, the study tells us, are not particularly risk-averse, nor risk-prone. But as we age, the constantly shifting information from the markets creates confusion about the difference the two. That's the bad news.

The good news is that other research has found that older decision-makers tend to be more optimistic; they're more likely to accentuate the positive and eliminate the negative. They're less likely to sweat the small stuff, and may subconsciously discount the downside of iffy financial choices. That may be fine if they're betting on their own portfolio. But if it's yours? Well, as the old song goes, who wants to mess with Mr. In-Between?

*Susan Pinker is a psychologist and author of *The Sexual Paradox: Extreme Men, Gifted Women and the Real Gender Gap*.*

