The Retirement Game

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Retirement is an odd notion when you think of it, and a modern one in the scheme of human history. For our ancestors, the idea that you had earned enough money for one lifetime, that it was okay to stop working and enjoy the fruits of your labor—would have been incomprehensible. Indeed, until quite recently the deal was: You worked, you used what you had earned, and then you worked some more. Then you died.

This is still true for way too many of the world's people, who continue to live hand to mouth. But there are also many more people—and a growing number every year—who don't really have to work anymore, but do, who forgo the leisure of their golden years to earn yet more money. The per capita GDP, worldwide, has increased 200 times in the past two centuries and continues to grow, meaning that there are many people who have more wealth than they will ever live to enjoy.

So why not just stop working and earning? Why do people keep toiling long beyond when they have to? Of course, the lucky ones do it because they love their work, and others want to bequeath something to their kids or hedge against misfortune. But what about those who lack these motivations, yet earn too much money anyway?

Psychological scientist Christopher Hsee, of the University of Chicago's Booth School of Business, is interested in these workers. Working with colleagues Shirley and Jiao Zhang of the University of Miami, he wanted to explore the possibility that working people are driven by some powerful, deep-rooted need to keep working and amassing wealth. Is it possible, they asked, that unthinking accumulation of money is the mind's default position?

To study this question, Hsee developed a stripped-down laboratory simulation of the big question facing Baby Boomers all over the country: if and when to retire. Let's call it the Retirement Game. Many are familiar with the Ultimatum Game, which is a similar simulation for studying people's selfish and unselfish motives. It does not pretend to capture real life in all its complexity, but instead isolates human choice in its most basic form. That's what the Retirement Game does as well. It's a microcosm of a lifetime, in which people must make decisions about how much to work, for what rewards, and when to quit.

Here is how the Retirement Game simulation works. One by one, volunteers come into the lab and don a pair of headphones. During the first five minutes of the experiment—the earning phase of life—they can choose to relax and listen to pleasant piano music, or to disrupt the music and listen to grating noise. The music is meant to simulate leisure; the noise, work. Whenever volunteers are listening to noise, they earn "income" in the form of chocolates. Then, in the second five-minute phase, they get to enjoy the rewards of their hard work—eating as much of their amassed chocolate as they like. Hsee ran several versions of this simulation to explore different aspects of decision making about work and retirement.

In the first and simplest, some volunteers were much better earners than others. They banked a chocolate for every 20 episodes of noise, while their low-earning counterparts had to endure 120 episodes of noise for the same chocolate. The idea was to see if earning rate had any effect on retirement decisions, and it clearly did. Those who were well paid were much more likely to keep working—and to sock away more than they needed. In fact, they earned so much that they ended up leaving much more on the table than they ate. This is the equivalent of working until the day you die, amassing a lot of wealth but enjoying little of it. It's what Hsee labels mindless accumulation.

The low earners also earned more than they needed or wanted for enjoyment, though not as much as the high earners. This suggests that everyone has some bias toward mindless accumulation, regardless of their earning power. Hsee wanted to see if this automatic bias might be modified. So in a second study, some of the volunteers were asked beforehand to predict the optimal rewards they would want, while others were just left to their own devices. Hsee suspected that merely thinking about how much accumulated wealth they would want and need—that this mental act might temper mindless earning.

The findings were clear. Those who stopped to think about the future—and how much wealth they would really need—earned less over their "lifetime" than those who did not deliberate. In fact, they stopped earning almost exactly at the optimal level, while those who did not think about the future continued to accumulate excessively. In other words, they did not automatically forecast what they would really need. Finally—and most important—those who slowed down and thought about these issues—work, wealth, need—were happier than the others. The more people earned, the less happy they were. Apparently it's not true that having financial bragging rights—who has the most toys—is in itself a source of joy.

Hsee ran a couple more versions of the Retirement Game, which he details in a paper to appear in the journal *Psychological Science*. The most important additional finding was that, if people are required to stop earning—if there is an earnings cap that clicks in when people have earned enough to satisfy their needs for a lifetime—they will realize that more work is pointless—and stop. It seems that people—at least volunteers in the Retirement Game—did not enjoy working simply for the sake of working. What's more, the people who had a cap on their wealth accumulation were happier—both while they were earners, and later in retirement.

Wray Herbert's book, *On Second Thought*, is about cognitive biases and irrational decision making. Excerpts from his two blogs—"We're Only Human" and "Full Frontal Psychology"—appear regularly in *Scientific American Mind* and in *The Huffington Post*.