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DEFEND YOUR RESEARCH

You Make Better Decisions If You "See" Your Senior Self

by Hal Hershfield

Defend Your Research

HBR puts some surprising findings to the test

Hal Hershfield (above left, with an image of his digitally aged avatar on the right) is an assistant professor of marketing at New York University's Leonard N. Stern School of Business.

You Make Better Decisions If You "See" Your Senior Self

The finding: Many people feel disconnected from the individuals they'll be in the future and, as a result, discount rewards that would later benefit them. But brief exposure to aged images of the self can change that behavior.

The research: Hal Hershfield ran fMRI scans on subjects and found that the neural patterns seen when they described themselves 10 years in the future were markedly different from those seen when they described their current selves (but similar to those seen when they talked about actors). In a later asset allocation task, people whose brain activity changed the most when they began discussing their future selves were the least likely to favor large long-term gains over small immediate ones. However, in follow-up experiments, when subjects were shown aged images of themselves, that tendency disappeared.

The challenge: Do we really think of our older selves as strangers? And can digitally altered photos really improve our judgment? **Professor Hershfield, defend your research.**

Interview by Alison Beard

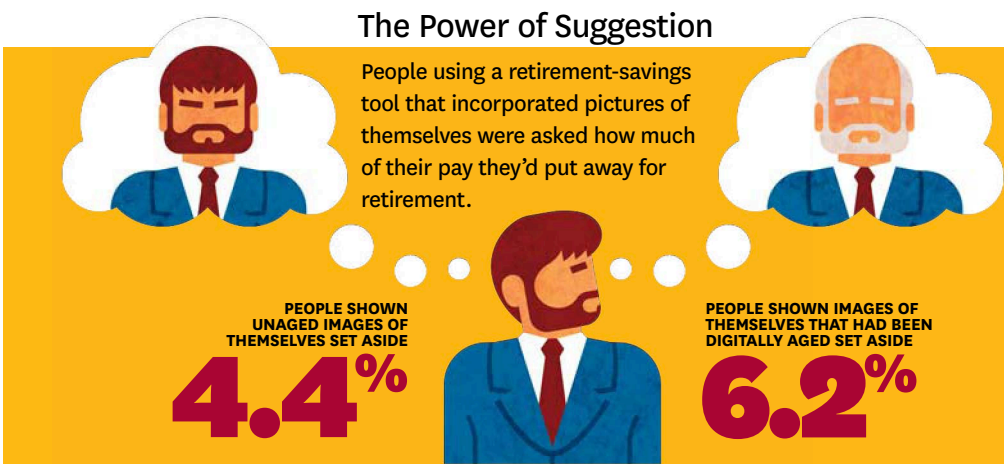
Hershfield: This study, which I did with G. Elliott Wimmer and Brian Knutson at Stanford, was the first to use fMRI technology to document the disconnect people feel with their future selves. But it built on existing research. For example, one study asked people how many hours they'd be willing to spend tutoring someone immediately and in the future and how much time they thought their classmates could donate immediately. They were stingy with their own time in the present but more willing to volunteer their time in the future and their classmates' time in the present, which suggests they thought of their future selves and other people in the same way. Studies have also shown that we have a third-person perspective on ourselves in the distant future. So, if you imagine your birthday next year, you'll envision the scene as if you were looking out from your own eyes. But if you imagine it 20 years from now, you'll probably picture an older version of yourself blowing out the candles. This is true for most but not all people. The scans revealed that some subjects did think of their current and future selves as the same person, and in our asset allocation task, those people were more likely to delay their gains. That's why we wanted to see if we could change the attitudes of everyone else. Could we help people get to know—and show more regard for—their future selves?

HBR: Without using a time machine.

Right. There's a large body of literature showing that emotional responses are heightened when you give people vivid examples: Donors give more to charity when they hear from a victim; pulmonologists smoke less than other doctors because they see dirty lungs all day. So I partnered with Daniel Goldstein of Microsoft Research, Jeremy Bailenson of Stanford, and several other Stanford researchers to see if giving people vivid images of their older selves would change their spending and saving preferences. We took photos of our subjects and used software to create digital avatars—half of which were aged with jowls, bags under the eyes, and gray hair. Wearing goggles and sensors, participants explored a virtual environment and came to a mirror that reflected either their current-self or future-self avatar. Afterward, we asked them to allocate $1,000 among four options—buying something nice for someone special, investing in a retirement fund, planning a fun event, or putting money into a checking account. Subjects exposed to aged avatars put nearly twice as much money into the retirement fund as the other people. Later we had some people see the older avatars of other subjects to test if that affected their choices, but it didn't. Only those who saw their own future selves were more likely to favor long-term rewards.

That seems like a really complicated way to get people to save money.

It is, which is why we've tested lower-tech options. In a follow-up experiment we



took pictures of people with happy, sad, and neutral expressions and inserted them into a retirement-savings slider tool. The idea was to show users how their decisions affected both their future income and their well-being in old age. Some subjects used a tool with pictures of themselves that had been aged. They set aside 6.8% of their pay for retirement, on average, versus 5.2% for those using a tool with pictures of their current selves. After that, we ran the experiment using a national pool of online participants who uploaded their own head shots. Even with variable photo quality and static expressions, the "aged face" tools prompted people to save 6.2% on average, versus 4.4% for the "current self" tools. Merrill Lynch is already using some of this technology on its site.

So there are applications for financial services. What other behaviors might you change by making people feel more connected to their senior selves?

Ethics is one area. I've worked with Jean-Louis van Gelder of the Netherlands Institute for the Study of Crime and Law Enforcement and Loran Nordgren of the Kellogg School to test whether people act more ethically when they feel closer to their future selves. In one study young adults who'd been asked to write a letter to themselves 20 years in the future were less likely to say they'd make an amoral choice—buying a stolen laptop, for example—than people who'd been asked to write to themselves in three months' time. In a second study, using the virtual techniques I've described, we found that 18-to-26-year-olds presented with avatars of their 40-year-old selves were less likely than those who saw current-self avatars to cheat on a test. Typically, we try to prevent delinquency by scaring kids about the consequences—taking young offenders on tours of adult prisons, for example. But our findings suggest there might be a more subtle way to get them to behave better.

If something as simple as letter writing works as well as virtual reality, why not just do that?

I'd argue that the aged photos are more fun and engaging, and it's an experience you'll remember, which could heighten or prolong the effect. That's something we might study in the future.

What about health? Can you use this technology to get people to stop smoking, use sunscreen, and eat well?

Dan Goldstein and I are starting a study on weight loss; we're hoping to present people with full-body images of themselves in the future that show how diet and exercise will change them. I could see an antismoking application, too; instead of showing people diseased organs or strangers with tracheotomies, we could show them what the habit will do to their own faces and bodies, which our findings suggest would be more powerful. My aunt keeps telling me I should look into skin care, too.

Yes, if my 20-year-old self had met my current self, she would have used a lot more eye cream. So should we all hang pictures of our aged selves in our houses?

That could work, as long as you keep noticing the picture and recognizing that that future person is dependent on the current you and is ultimately the same you—just occupying a slightly different body.

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