Don’t Stop Thinking About Tomorrow
How Constructing the Future Self can Transform Intertemporal Choice

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ACLI Lifetime Income Conference
Collaborators

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U.S. Life Expectancy: 1900-2005

Life Expectancy at 0

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Will not maintain pre-retirement standard of living

Have less than $25k in savings

Chooses an annuity

National Retirement Risk Index

% Households at Risk


Munnell, Webb & Golub-Sass, 2009; McKinsey Global Institute, 2008; EBRI, 2011; GAO, 2011
Why Is There Undersaving and Poor Planning?
The future is hard to think about.

Affective forecasting (Gilbert & Wilson, 2007; Loewenstein, 1996)

Delay of gratification (Mischel, 1972, 1989)
Future Self-Continuity

Connections to future self vary as a degree of temporal distance

At the extreme, the future self may seem like a different person

Parfit, 1971; Pronin & Ross, 2006; Schelling, 1984; Thaler & Shefrin, 1981; Bartels & Rips, 2010; Ersner-Hershfield et al., 2009; Frederick, 1999
Reconsider a boy who starts to smoke, knowing and hardly caring that this may cause him to suffer greatly fifty years later. This boy does not identify with his future self. His attitude toward this future self is in some ways like his attitude to other people…

- Derek Parfit
Future Self-Continuity

“I never get enough sleep. I stay up late at night because I’m ‘night guy’...‘What about getting up after five hours of sleep?’... ‘Oh, that’s morning guy’s problem. That’s not my problem – I’m night guy! I stay up as late as I want.’ So, you get up in the morning, with your alarm, and you’re exhausted and groggy... Oh, I hate that ‘night guy’!

The only thing ‘morning guy’ can do is try to oversleep often enough so that ‘day guy’ loses his job and ‘night guy’ has no money to go out anymore”

- Jerry Seinfeld
Future Self-Continuity Hypothesis

The way the future self is perceived should be an important predictor of decision-making

Future self seen as stranger
- Low motivation to save

Future self seen as similar
- High motivation to save

Parfit, 1971, 1987; Schelling, 1984
Testing the Theory
Future Self-Continuity Scale

Circle the picture that best describes how similar you feel to your future self (in 10 years)
Examining Real-World Saving

152 adults from Bay Area

Ages 18-86

Assessed assets accrued over time

Categorical scale (0 = $0; 16 = $1.5M+)
Similarity Predicts Assets When Controlling for Age & Education

$r_{147} = .34^{***}$

Going Beyond Self-Report
In The Brain...

Self > Other

Kelly et al., 2002; Northoff et al., 2006
Leverage this finding to further test the future self-continuity hypothesis.

Just as there are self vs. other neural differences, there should be current self vs. future self neural differences.

Differences should be related to saving behavior.
Method

Judgments made about Anderson (1968) trait words

Judgments for current self, future self (in ten years), current other, and future other

Two weeks later, subjects completed a decision-making task (higher numbers = worse saving)
Neural Difference Between Self and Other

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But is Current Self Different Than Future Self?

$F(1,17) = 6.27, p < .05$

Ersner-Hershfield et al., 2009, SCAN
Do Neural Differences Predict Discounting?

Neural Difference Between Current Self & Future Self

Future self “looks” like other person, worst saving behavior

Ersner-Hershfield et al., 2009, SCAN
How Can the Gap be Bridged?
A Vivid Future Self

“A failure of belief” and an inability to vividly imagine future wants/desires can lead to poor choices

Vivid examples affect behavior

e.g., Tim Russert and heart checkups, Pulmonologists and smoking

Could vivid examples of the future self enhance saving?

Loewenstein, 1996; Parfit, 1971
Audio-Visual Display

Head Tracking

Rendering Computer

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Virtual Reality Experiment

Approx 5 min

Filler Tasks

Monetary Allocation Questionnaire

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Does Exposure to Future Self Lead to Higher Allocation?

Hershfield et al., in press, JMR
Does Just Any Old Face Work?

$\text{Standardized Saving Index}$

- $\text{Future Other}$
- $\text{Future Self}$

$t(19) = 2.03, p = .05$

Hershfield et al., in press, *JMR*
Practical Applications
Putting Manipulation Into Practice

Undergraduates ($N = 42$) made retirement allocation decisions via online platform
Please use the scale below to indicate your preferred retirement allocation

Current Annual Income XX%

Percent of paycheck that can be taken home

Retirement Income XX%

Percent of final working year’s income, received annually in retirement

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Parameters

Age: 22
Work start age: 23
Retirement age: 68
Salary of $64K at age 40
Match of 5%
Please use the scale below to indicate your preferred retirement allocation
Please use the scale below to indicate your preferred retirement allocation.
Please use the scale below to indicate your preferred retirement allocation.
Please use the scale below to indicate your preferred retirement allocation.

Current Annual Income  XX%  Retirement Income  XX%
Please use the scale below to indicate your preferred retirement allocation.
Please use the scale below to indicate your preferred retirement allocation.
Can a Nudge Toward the Future Self Lead to Increased Saving?

Hershfield et al., in press, JMR

$t(38) = 2.38, p < .05$
Is a Smile Necessary?

Current Annual Income XX%

Retirement Income XX%

National sample of adults (N = 38) made retirement allocation decisions via online platform

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Is a Smile Necessary?

% Allocation Toward Retirement

Current Self  Future Self

$t(36) = 2.28, p < .05$

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Does this Affect Connection to Future Self?

Hershfield et al., in press, JMR

$\text{Similarity to Future Self}$

Current Self

Future Self

$t(36) = 1.97, p = .05$
What Comes Next?
Practical Applications

Automated age-progression procedure

- Financial advisors can use with clients
- Employers can implement for retirement allocation sessions
- Consumers can customize for use with online banking tools
Practical Applications

Do such interventions work for “real” people?

For whom do such interventions work better…or worse?

Visual or non-visual interventions for retirees making annuity decisions?
Selected References


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Thanks!