Introduction

Cognitive NeuroEconomics

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This class is rooted in neuroscience, cognitive science and behavioral economics

About this class: everything is intertwined
One cannot begin to understand things like social behavior, decision-making, aggression, cooperation and empathy without neuroscience, cognitive science, biology, psychology & behavioral economics.
Understanding how people make decisions

- Why are some decisions so difficult?
- How can decision making be improved?
- Field of behavioral economics
Cancer patient: Surgical Treatment

Both treatments have the same 80% cancer cure rate.

Treatment 1
- Higher risk of death

Treatment 2
- Risk of severe but manageable complications.
Surgery outcome probabilities:

Treatment 1:
- Cure: 80%
- Death: 20%

Treatment 2:
- Cure: 80%
- Death: 16% major complications
- 4%
What would you do?

I would choose treatment #1

I would choose treatment #2
How would you advise a friend?

I would choose treatment #1 for my friend.

I would choose treatment #2 for my friend.
I would choose treatment #2 for my friend.

Majority of people
Paying for blood reduces total blood supply and discourages blood donation.
Non-monetary incentives can overcome motivation crowding out

Joan Costa-i-Font, Mireia Jofre-Bonet, Steven Yen 04 August 2011

Paying some people to donate blood while others receive a cursory “thanks” has been shown to crowd out the altruistic donors. This column examines data from 15 European countries and finds that while this is the case for monetary rewards, it is not the case for non-monetary rewards.

While rarely the focus of economists’ thinking, good deeds make the world go round. Blood donations, for example, are a critical element of healthcare systems across the globe. But when human kindness comes up short and more blood is needed, monetary incentives are often provided.

Paying some with cash and others with thanks can produce a perverse effect – a downward sloped supply function. As Titmuss (1970) famously pointed out, paying some may “crowd out” donations from purely altruistic donors. It can also reduce blood quality. The proposition was discussed by Solow (1971) and Arrow (1972). They suggest that the effects of price incentives should simply add to those of altruism so supply should slope up.

https://voxeu.org/article/blood-money-doesn-t-pay-new-evidence-incentives-blood-donation
In 1997, the World Health Organization (WHO) recommended that all blood donations should come from unpaid voluntary donors. But, by 2006 only 49 of 124 countries surveyed had established this as a standard. Further, in the WHO European region the number of donors varies from less than 4.5 to over 45 per 1000 general population. Only 39% of the general populations are eligible to donate, but fewer than 5% of those eligible actually donate.

Altruism and the “big society”
The issues involved go much further than blood. Understanding the interaction between voluntary and paid is a key part of correcting government interventions which are held to crowd-out individual actions. For example, the current UK government has advocated the notion of a “big society”, which, although rather unclearly defined, appears to have altruistic behaviour as a central theme. While there is much loose talk centred on the definition of this policy tool, there is a growing interest in whether such behaviour can be motivated through incentive mechanisms.
Olympians - 2 place disappointment

- Paradox
- Silver > Bronze
- Counter intuitive
Why Winning Olympic Silver Is More Disappointing Than Bronze-And The Crucial Thing That Tells Us About Performance Reviews

This article is by Victoria Husted Medvec, the Adeline Barry Davee professor of management and organizations and executive director of the Center for Executive Women at Northwestern University’s Kellogg School of Management.

For Olympic athletes, nothing shines quite like gold. Silver, while still impressive, is often tarnished with thoughts of what might have been. This disappointment, rooted in what is known as counterfactual thinking, is not limited to athletes who miss winning a race by 0.01 second. The same letdown is often felt by employees whose performance evaluations are just shy of excellent, like the student whose grade falls one point shy of an A.

Curiously, the opposite is generally true for bronze medalists, for whom the “what could have been” is fourth place with no medal at all. Happy to be on the podium, third-place finishers generally feel pleased with their performance—just like the employee who squeak into the good category in an evaluation, or the student who ekes out one more point to make a B. In fact, as research I conducted with my colleagues Thomas Gilovich of Cornell University and Scott Madley of the University of Toledo has shown, bronze medalists are generally happier than those who bring home silver; counterfactual thoughts lead those who perform better to feel worse than those they outperform.
Richard Thaler of the University of Chicago wins Nobel for work in behavioral economics

Speaking to students, colleagues and the media at the university Monday after winning the $1.1 million prize, Thaler said he was "very, very happy" to be the first to acknowledge how people make economic decisions.

Unlike historical economic models that assumed humans were well-informed and perfectly rational when making decisions, Thaler's research showed that not only were they not the case, but people can be irrational in systematic ways. Accepting for that pattern to help explain why people sometimes seem to act outside their best interest - whether they're making important financial decisions about saving for retirement, or even when they choose what shoes to "Buy or Not to Buy.

Richard H. Thaler, economist, University of Chicago
Awarded the Nobel Memorial Prize in Economic Science for research showing how people's choices on economic matters are not always rational.

The Curious Politics of the ‘Nudge’

By Craig R. Fox and David Tannenbaum  Sept. 26, 2015

The response to the executive order has been generally positive, but some conservatives have been critical, characterizing it as an instance of government overreach. (“President Obama Orders Behavioral Experiments on American Public” ran a headline on the website The Daily Caller.) However, it is worth noting that when a similar “behavioral insights team” was founded by the conservative government of the British prime minister, David Cameron, it met resistance from the political left (“Blair’s Minds Will Be Controlled Without Us Knowing It” ran a headline in The Guardian.)

Is it possible that partisans from both ends of the political spectrum confuse their feelings about a general-purpose policy method (such as nudges) with their feelings about a specific policy goal (or about those who endorse that goal)? We think so. In a series of recent experiments that we conducted with Todd Rogers of the Harvard Kennedy School, we found evidence for a “partisan nudge bias.”

In one experiment, we presented participants of varying political persuasions with short descriptions of various behavioral policy nudges (e.g., designating enrollment in a program as a default). To explain how such policy tools could be applied, we illustrated them using either an example of a liberal policy priority (e.g., encouraging how income individuals to enroll in food stamps programs for which they were legally eligible) or a conservative policy priority (e.g., encouraging the wealthy to take advantage of capital gains tax breaks they were legally eligible for). The participants were then asked to rate how ethical, manipulative and coercive they found the nudge to be, as a general policy approach.

Figure adapted from NYTimes.com Oscar Bolton Green
Thaler -

1. Limited rationality
2. Social preferences
3. Lack of self-control
contestants tended to become more risk seeking, almost regardless of what happened.
WHY DID THE CHICKEN CROSS THE ROAD?

It is a behavioral biological question.