

# **Exeter College Summer Programme**

#### **Behavioural Economics**

#### **Course Outline**

In recent years, the standard neoclassical economic assumption that individual makes decisions purely to maximise their own material self-interest has been extensively revised. It is now widely accepted that people do not only care about their own material payoff, but they also care about other people's behaviours; often succumb to temptation; their self-expectation influences how they behave; some people are motivated to be helpful to others or do the right thing, whilst others like to see other people worse off than themselves; people are influenced by how choices are presented to them; they are bad at computation and are prone to bad habits. Psychological and social factors play an important role in human behaviours and decision-making processes. Behavioural economics increases the explanatory power of economics by incorporating these factors in order to provide more realistic psychological foundations for economic analysis. The main objective of this course is to introduce students to the theoretical and empirical research in behavioural economics and discuss how the use of methods and evidence in behavioural economics has changed both economics as a discipline and policymaking processes in the past few decades.

# **Prerequisites**

The course is designed to be multidisciplinary and non-mathematical. It is suitable for students of all disciplines who have a strong interest in human behaviour, psychology and economics. There are no prerequisites and technical material is kept to a minimum. Although some background in Economics and/or Psychology would be helpful.

#### **Teaching Methods and Assessment**

- 12 x 1.25hr Lectures (15hrs)
- 6 x 1.25hr Seminars (7.5hrs)
- 4 x 1.25hrs Tutorials (5hrs)

Final Assessment: An essay of no more than 3,000 words (40%), a final three-hour written examination (40%), oral presentation (10%) and participation in seminar discussion (10%).

#### General readings

Students who are interested in this course but have no background in Economics or Psychology should read the following popular books:

- Richard H. Thaler and Cass R. Sunstein. 2009. Nudge: Improving Decisions About Health, Wealthh and Happiness. Yale University Press.
- Dan Ariely. 2009. Predictably Irrational: The Hidden Forces That Shapes Our Decisions. HarperCollins.

- Daniel. Kahneman. 2012. Thinking, Fast and Slow. Penguin.
- https://www.theguardian.com/world/2017/oct/09/what-is-behavioural-economics-richard-thaler-nobel-prize
- https://www.theguardian.com/science/2014/jun/01/nudge-economics-freakonomics-daniel-kahneman-debunked

# Behavioural Economics Research Groups at Oxford:

- https://www.economics.ox.ac.uk/research-group/behavioural-economics
- https://cess-nuffield.nuff.ox.ac.uk/

#### Lecture list

## **PART I: THEORY**

# **Lecture 1: What is Behavioural Economics?**

This lecture will discuss the emergence and establishment of behavioural economics as an independent sub-discipline of economics. We will look at how entities such as beliefs, emotions, and heuristics and cognitive ability can be incorporated into economic analysis of decision-making.

#### **Readings:**

- Ashraf, Nava, Camerer, Colin F. & Loewenstein, George (2005). Adam Smith, behavioural Economist. Journal of Economic Perspectives, 19, 131-145.
- Laibson, David & Zeckhauser, Richard (1998). Amos Tversky and the ascent of behavioural economics. Journal of Risk and Uncertainty, 16, 7-47.
- Colin Camerer and George Loewenstein. 2004. "Behavioural Economics: Past, Present, Future", http://people.hss.caltech.edu/~camerer/ribe239.pdf

## Lecture 2: Evolution of Economics as a Theory-Testing Discipline

Economics was seen as non-experimental for much of its history, on the grounds that feasible laboratory experiments would not contribute usefully to the evaluation of economic theory. Due to overwhelming and fast-growing experimental evidence in recent years, this view is now changing (although a substantial majority of economists still regard economics as non-experimental science) Even among economists who conduct experiments, there are opposing and often strongly held views about whether certain design features are mandated by the subject matter of economics. This lecture will discuss how evidence has been used to test economic theories first by using laboratory experiments, the subsequent concern about 'external validity' that led to the development of different types of field experiments and ultimately policy evaluation using randomised controlled trials.

## **Readings:**

- Nicholas Bardsley, Robin Cubitt, Graham Loomes, Perter Moffat, Chris Starmer, Robert Sugden. 2010. Experimental Economics: Rethinking the Rules. Princeton University Press. <a href="https://books.google.co.uk/books?id=160fbw4CnB4C&dq=What+types+of+evidence+is+legitimate+to+confront+the+theory&source=gbs">https://books.google.co.uk/books?id=160fbw4CnB4C&dq=What+types+of+evidence+is+legitimate+to+confront+the+theory&source=gbs</a> navlinks s
- Stefano Dellavigna, "Psychology and Economics: Evidence from the Field," Journal of Economic Literature, 47 (2009), 315-372; http://elsa.berkeley.edu/~sdellavi/wp/01-DellaVigna-4721.pdf.
- Matthew Rabin, "A Perspective on Psychology and Economics," European Economic Review 46 (2002), 657-685; http://dx.doi.org/10.1016/S0014-2921%2801%2900207-0.
- Daniel Kahneman, "Maps of Bounded Rationality: Psychology for Behavioral Economics," American Economic Review 93 (2003), 1449-1475; http://www.jstor.org/stable/3132137

#### Lecture 3: Bounded Rationality & Reference-Dependence: Judgment, Choice, and Risk

This lecture will give a broad overview of two key research categories in Behavioural Economics: *Judgment* and *Choice*. Judgment research deals with the processes people use to estimate probabilities.

Choice deals with the processes people use to select among actions, taking account of any relevant judgments they may have made. We will also look at empirical methods in behavioural economics – experimental economics.

# **Readings:**

- Amos Tversky and Daniel Kahneman, "Judgment under Uncertainty: Heuristics and Biases," Science 185 (1974), 1124 1131; http://www.jstor.org/stable/1738360
- Kahneman, D. & Tversky, A. (1979). Prospect theory: An analysis of decision under risk Econometrica, 47, 263-291.
- Sharon Oster and Fiona Scott Morton, "Behavioral Biases Meet the Market: The Case of Magazine Subscription Prices," Advances in Economic Analysis & Policy 5 (2005), Article 1; http://www.bepress.com/bejeap/advances/vol5/iss1/art1
- Matthew Rabin, "Inference by Believers in the Law of Small Numbers," Quarterly Journal of Economics 117 (2002), 775-816; http://www.jstor.org/stable/4132489
- Matthew Rabin and Dimitri Vayanos, "The Gambler's and Hot-Hand Fallacies: Theory and Applications," Review of Economic Studies 77 (2010), 730-778; https://www.jstor.org/stable/pdf/40587644.pdf
- Henry Blodget, "Wall Street Self-Defense: Born Suckers: The Greatest Wall Street Danger of All: You," Slate, December 14, 2004 (amusing optional reading) http://dss.ucsd.edu/~vcrawfor/WallStreetBiases.html
- Barberis, Nicolas, Thirty Years of Prospect Theory in Economics: A Review and Assessment, Journal of Economic Perspectives 27-1, 173?196 (2013)
- Daniel Kahneman, Jack Knetsch, and Richard Thaler, "Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias," Journal of Economic Perspectives 5 (1991), 193-206; http://www.jstor.org/stable/1942711
- Daniel Kahneman, Jack Knetsch, and Richard Thaler, "Experimental Tests of the Endowment Effect and the Coase Theorem," Journal of Political Economy 98 (1990), 1325-1348; Chapter 2 in Advances; http://www.jstor.org/stable/2937761

#### **Lecture 4: Time Preference and Self-Control**

In this lecture we will look at decision-making over time both theoretically and empirically. Typically, it is assumed that the instantaneous utility each period depends solely on consumption in that period, and that the utilities from streams of consumption are discounted exponentially, applying the same discount rate in each period. However, recent behavioural economic evidence has shown that this is not always the case.

#### **Readings:**

- George Loewenstein and Richard Thaler, "Anomalies: Intertemporal Choice," Journal of Economic Perspectives 3 (1989), 181-193; http://www.jstor.org/stable/1942918
- Loewenstein, G. (1988). Frames of mind in intertemporal choice. Management Science, 34, 200-214.
- Shane Frederick, George Loewenstein, and Ted O'Donoghue, "Time Discounting and Time Preference: A Critical Review," Journal of Economic Literature 40 (2002), 351-401; Chapter 6 in Advances; <a href="http://www.jstor.org/stable/2698382">http://www.jstor.org/stable/2698382</a> OR <a href="http://www.hss.caltech.edu/~camerer/NYU/03LowensteinODonoghueFrederick+.pdf">http://www.hss.caltech.edu/~camerer/NYU/03LowensteinODonoghueFrederick+.pdf</a>

- Ted O'Donoghue and Matthew Rabin, "Doing it Now or Later," American Economic Review 89 (1999), 103–124; Chapter 7 in Advances; http://www.jstor.org/stable/116981
- Dan Ariely and Klaus Wertenbroch, "Procrastination, Deadlines, and Performance: Self-Control by Precommitment," Psychological Science, 13 (2002): 219-224; http://pss.sagepub.com/content/13/3/219.short

# **Lecture 5: Social Preferences & Charitable Giving**

People do not only care about their own material self-interest, but they also care about other's wellbeing both in absolute and relative sense. They may choose to reward those who are kind to them or punish those who have been hostile, even when punishment is costly to them. Some people may be willing to help others without expecting anything in return but there are also people who may want to harm others for no particular reason, except for the fact that they get pleasure from seeing others suffer. This lecture will give an overview of how social environment affects individual decisions and behaviours.

# **Readings:**

- Fehr, Ernst and Klaus Schmidt, The Economics of Fairness, Reciprocity and Altruism. Experimental Evidence and New Theories; Handbook of the Economics of Giving, Altruism and Reciprocity, chapter 8 (2006)
- John A. List. "Social Preferences: Some Thoughts from the Field", The Annual Review of Economics (2009).
  - https://www.annualreviews.org/doi/pdf/10.1146/annurev.economics.050708.142958
- Samuel Bowles. "Economic Incentives and Social Preferences: Substitutes or Compliments?
   Journal of Economic Literature, 50(2), (2012).
   https://www.jstor.org/stable/pdf/23270024.pdf?refreqid=excelsior%3Afb205c22c1526d159904 6600157e1e8f

#### **Lecture 6: Neuroeconomics**

Economics, psychology and neuroscience are converging into a unified discipline of Neuroeconomics with ultimate aim of creating a single, general theory of human decision-making. In this lecture, we will discuss how neuroeconomics provides biologists, economists, psychologists and social scientists with a deeper understanding of how they make their own decisions and how others decide. Neurobiological mechanisms of decision-making, decisions under risk, trust and cooperation will be central issue of this lecture which are the topics covered in the previous lectures. You will be provided with the most recent evidence from brain-imaging techniques (fMRI, TMS, etc) and introduced to explanatory models behind them.

## **Readings:**

- Camerer, C. et al. (2005). "Neuroeconomics: How Neuroscience Can Inform Economics", Journal of Economic Literature, vol. 43, no. 1, pp. 9-64.
- Knutson, Brian., Rick, Scott, Wimmer, G. Elliott., Prelec, Drazen & Loewenstein, George (2007). Neural predictors of purchases. Neuron.
- Singer, T. and Fehr, E. (2005). "Neuroscientific Foundations of Economic Decision-making" American Economic Review (Papers and Proceedings), vol. 95, no. 2, pp. 340-345.

 Colin Camerer, George Loewenstein, and Drazen prelec. 2004. "Neuroeconomics: Why Economics needs Brains" https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.0347-0520.2004.00377.x

#### PART II: APPLICATIONS OF BEHAVIOURAL ECONOMICS

## Lecture 7: Research Questions and Research Design

How do we apply Behavioural Economics Theory to the real world? When conducting any kind of research theoretical or empirical, the first step is to know what your research questions are and how would you go about answering these questions. The association between question and design is fundamental to the whole research process. The extent to which research question is matched with an appropriate design determines the quality of the research outcome. This lecture will discuss the process known as the 'Theory of Change' to formulate research questions and how to choose the best way to answer these questions through research design.

# **Readings:**

- World Bank (2015). World Development Report: Mind, Society, and Behaviour.
- Esther Duflo, Rachel Glennerster, and Michael Kremer. 2007. "Using randomization in development economics research: A toolkit"
  - http://scholar.harvard.edu/files/kremer/files/randomization toolkit dev economics.pdf
  - Rachel Glennersters and Kudzai Takavarasha. 2013. Running Randomized Evaluations: A Practical Guide http://runningres.com/
  - Dean Karlan and Jacob Appel. 2016. Failing in the Field: What We Can Learn When Field Experiments Go Wrong. https://www.amazon.co.uk/gp/product/0691161895/ref=ox sc act title 2?smid=A3P5ROK
    - L5A1OLE&psc=1
  - Innovation for Poverty Action's Research Transparency Initiative https://www.poverty-action.org/research-resources/research-transparency
  - James P. Connell and Anne C. Kubisch. 1998. "Applying a Theory of Change Approach to the Evaluation of Comprehensive Community Initiatives: Progress, Prospects, and Problems"
    - http://www.dmeforpeace.org/sites/default/files/080713%20Applying+Theory+of+Change+Approach.pdf
  - Paul Mason and Marian Barnes. 2007. "Constructing Theories of Change: Methods and Sources" http://journals.sagepub.com/doi/pdf/10.1177/1356389007075221

# Other Useful resources:

- https://www.sheffield.ac.uk/ssid/301/tash/research/design/questions
- https://www.poverty-action.org/right-fit-evidence

# **Lecture 8: Evidence-Based Policy Making**

The word 'evaluation' can be interpreted quite broadly. It means different things to different people and organisation. In this lecture, we will focus on an evaluation, which is related to social programme or policy. This is known as 'Impact Evaluation', which involves developing hypotheses of what is going on

and then test those hypotheses. Impact evaluation can be associated with positive or negative outcomes and sometimes it can also produce 'null' result (no change is observed). There are many methods of doing impact evaluation but the one, which is used by many economists, particularly policy evaluations is 'randomised evaluation'. In this lecture we will discuss the basic principles of this method, which has become the 'Gold standard' of policy evaluation in economics.

# **Readings:**

- Esther Duflo, Rachel Glennerster, and Michael Kremer. 2007. "Using randomization in development economics research: A toolkit" http://scholar.harvard.edu/files/kremer/files/randomization toolkit dev economics.pdf
- Rachel Glennersters and Kudzai Takavarasha. 2013. Running Randomized Evaluations: A Practical Guide http://runningres.com/
- Michael Kremer. 2003. "Programs in Developing Countries: Some Lessons" https://pubs.aeaweb.org/doi/pdfplus/10.1257/000282803321946886

#### Other Useful resources:

- https://www.behaviouralinsights.co.uk/publications/
- http://www.worldbank.org/en/programs/embed#2

# Lecture 9: Measuring Outcomes and Working with Data

Datasets are the single most valuable (and most expensive) outputs of the research. In order to obtain a 'good dataset', we need to specify the outcomes and the indicators that we will use to measure them. This requires a deep understanding of the programme/policy being developed and evaluated, including its objectives, causal relationships, and potential pathways through which the programme or policy can impact the outcomes (both positively and negatively). This lecture will discuss how outcomes of interest are defined, how to link outcomes with the Theory of Change, how to measure them, how to obtain data on outcomes and how do we ensure that data quality standards are met in the process of collecting data?

#### **Readings:**

- Laura Feeney, Jason Bauman, Julia Chabrier, Geeti Mehra, and Michelle Woodford. 2015. "Using Administrative Data for Randomized Evaluation" https://www.povertyactionlab.org/sites/default/files/resources/2017.02.07-Admin-Data-Guide.pdf
- Rachel Glennersters and Kudzai Takavarasha. 2013. Running Randomized Evaluations: A Practical Guide http://runningres.com/

## **Other Useful resources:**

- https://www.theguardian.com/global-development-professionals-network/2016/mar/16/the-top-10-sources-of-data-for-international-development-research
- https://www.povertyactionlab.org/admindatacatalog

# Lecture 10: The way forward: Transparency, Good Governance of Evidence and Ethical Considerations

The distinguishing feature of the scientific research is that its standards and methodologies are public, contested and replicable. This applies equally to the social sciences as it does to the hard or natural sciences. Scientific progress requires that scholars articulate their arguments, describe their methodologies, and reproduce the evidence that they use, and that others participate in this endeavour by questioning and critiquing. This lecture will discuss the extent to which the research community has been promoting greater transparency of the use of evidence generated from research and in particular, impact evaluation.

## **Readings:**

- Berkeley Initiative for Transparency in the Social Sciences https://www.bitss.org/
- The Center for Open Science https://cos.io/
- Innovation for Poverty Action's Research Transparency Initiative https://www.poverty-action.org/research-resources/research-transparency
- Justin Parkhurst (2017). The Politics of evidence: from evidence-based policy to the good governance of evidence. Routledge Studies in Governance and Public Policy. Routledge, Abingdon, Oxon, UK. ISBN 9781138939400.

#### **Lecture 11: Behavioural Ethics**

Evidence from behavioural science research has shown that people are less consistent and less rational in their decisions than they would like to admit to themselves. Sometimes a person may not be aware when his or her behaviour diverts from ethical standards. This is because justifications and biased judgment blur the perception of ethical breaches. The aim of this lecture is to provide students with insights into human behaviour that can be easily translated into actions they can take to create more ethical environments.

#### **Readings:**

- Steven Pinker (2008). The moral instinct. The New York Times, 13 Jan.
- Haidt, Jonathan (2012). The Righteous Mind: Why Good People are Divided by Politics and Religion. New York: Pantheon Books. » See especially Chapters 1-4.
- Bazerman, Max H. and Ann E. Tenbrunsel (2012). Blind Spots: Why We Fail to Do What's Right and What to Do about It. Princeton, NJ: Princeton University Press. See especially Chapters 1-4.
- Epley, Nicholas and David Tannenbaum (in press). Treating ethics as a design problem. Behavioral Science and Policy.

# Lecture 12: Behavioural Challenges to Ethical Living

The lecture seeks to help students understand some of the psychological mechanisms that can lead one towards unethical behaviour in certain circumstances. By discussing several well-known psychological experiments, we will discuss certain basic human features which, while often working in our favour, can sometimes lead us to act unethically. The Module seeks to motivate students to take responsibility for their lives by avoiding common pitfalls that can impair their ability to act ethically.

#### Reading:

- Tavris, Caroll and Elliot Aronson (2015). Mistakes Were Made (But Not by Me): Why We Justify Foolish Beliefs, Bad Decisions, and Hurtful Acts. New York: Houghton Mifflin Harcourt.
- Epley, Nicholas and Thomas Gilovich (2016). "The Mechanics of Motivated Reasoning." Journal of Economic Perspectives, vol. 30, no 3, pp. 133-140.
- Ariely, Dan (2012). The (Honest) Truth About Dishonesty: How We Lie to Everyone Especially Ourselves. London: HarperCollins Publishers.
- Rorty, Amélie Oksenberg (2001). How to harden your heart: six easy ways to become corrupt. The Many Faces of Evil: Historical Perspectives. Amélie Oksenberg Rorty, ed. London: Routledge.