## MG311 Foundations of Behavioural Decision Science

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## **Course Description**

This course introduces students to the foundations of Behavioural Decision Science: the science that explains and predicts how humans make decisions (the decision 'process') and how well (the decision 'outcome'). The course will focus on the process, and unveil the subtle and sometimes unconscious influences played by the context in which decisions are faced: is there risk and uncertainty? What has been chosen in the past? Is the decision maker in a positive or negative mood? Is the decision made offline or online, from a "menu" or from memory? All of these (and more) are factors that often determine how information is searched before choosing, how decisions are made and the quality of the decision made.

The course is entirely seminar-based, and will alternate teaching with interactive activities designed to experience first-hand the process of deciding, before reviewing behavioural decision theories and evidence from lab and field studies. Teaching will cover experiments and applications across different 'domains' (managerial, policy, organisations, consumer, and even personal, like choice of career or a partner). The aim of the course is to offer a balanced view of the strengths and weaknesses that humans have when making any decision and cover successful interventions of "choice architecture" which are being implemented around the world in private and public organisations to help consumers and the public make it easier to make good decisions without complex systems or support. The assessment will give students the opportunity to apply their skills to spot strengths and weaknesses of a decision of their choosing, as well as to produce a "state-of-art behavioural report" that reviews in a rigorous and scholarly manner the literature and empirical evidence on a specific aspect of the intuitive decision process under scrutiny.

#### **Teaching**

25 hours of classes in the LT.

Students on this course will have a reading week in Week 6, in line with departmental policy.

#### Formative coursework

A short and timed group presentation (after Reading Week). You will work as a group and spot the bias in a real decision that you will select. You will give a brief group presentation of the bias and the mechanism that requires correction (via debiasing or nudging). After the presentation you will receive feedback as a group. This feedback will help you prepare for the summative assessment.

#### Summative assessment

Coursework (100%, 3000 words) in the ST.

Summative (due beginning of ST): The summative assessment will be a 'Behavioural Report' which comprises two parts.

In the first part (no more than 1000 words), you will be asked to report on the decision, the bias and the nudging or debiasing intervention designed by you and your group. In the second part of the report (no more than 2000 words), you will focus on one of the processes/aspects that you covered in the first part of the essay and complete a scholarly review on it, with reference to behavioural literature, theories and concepts. The first part of the essay will count for 50% of your mark while 50% will come from the second part. You will be required to provide full essay-style referencing. Although the summative assignment will take the decision makers' presented in groups, all students will write both parts of the summative essays on their own and will receive an individual mark.

**Office hours:** The official office hours are: Thursday, 2 pm to 4 pm.

**Email policy**: Email only to schedule meetings or to ask questions that are not related to the academic content of the course. For questions about the readings, notes, etc. please make an appointment and show up in person.

**Timing**: In accordance with LSE tradition, lectures and classes will normally start at five minutes past the hour and finish at five minutes to the hour. Please try to arrive at the hour, so that we can start punctually. Arriving late is not recommended; the first five minutes of each lecture are usually the most important. If you do arrive late, please read the lecture notes before asking any clarifying questions, because your question might have been answered before you arrived. Be considerate; your student colleagues will appreciate it!

There will be a ten-minute break starting at around 4.15. This is for you to catch your breath and refuel for the second part of the lecture, but not much more than that. If possible, try to stay in the lecture room during the break (have a quick chat with the person next you). If you definitely need to leave the room, that is fine, but please don't do it only for buying a snack or having a more entertaining conversation. In practice, if we cannot restart the lecture on time, we are likely to finish late.

#### Indicative reading

Ariely, D. (2008). Predictably Irrational: The Hidden Forces That Shape Our Decisions. Harper Collins.

Bazerman, M. (2017). Judgment in Managerial Decision Making. New York: Wiley. 8th edition.

Hastie, R., and Dawes, R.M. (2001). Rational Choice in an Uncertain World. Sage Publications, Thousand Oaks.

Kahneman, D. (2011). Thinking Fast and Slow. London: Allen Lane.

Sunstein, C.R. Thaler, R.H. (2008). Nudge - New Haven, CT: Yale University Press.

Thaler, R.H. (2015). Misbehaving: The Making of Behavioural Economics. London: Allen Lane.

#### Course Outline

## Class 1: Friday, January 18: Introduction

Behavioural decision science: rational choice theory, neoclassical economics, cognitive science, behavioural economics.

#### **Essential reading**

Sunstein, Cass and Richard Thaler (2016), 'The Two Friends Who Changed How We Think About How We Think,' *The New Yorker*, December 7.

## Additional reading

Angner, Erik and George Loewenstein (2012), "Behavioral economics," in Uskali Mäki, ed., *Handbook of the Philosophy of Science: Philosophy of Economics*, Amsterdam: Elsevier, pp. 641-90.

Heukelom, Floris (2014), *Behavioral Economics: A History*, New York, NY: Cambridge University Press.

#### Class 2: Friday, January 25: Decision-making under Certainty

Decoy effect, compromise effect, context effects, loss aversion and endowment effect, reference point, status quo bias, framing, value function of prospect theory.

#### **Essential reading**

Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler (1991), 'Anomalies: The endowment effect, loss aversion, and status quo bias," *The Journal of Economic Perspectives*, 5(1), 193-206.

## Additional reading

Huber, Joel, John W. Payne, and Christopher Puto (1982), 'Adding asymmetrically-dominated alternatives: Violations of regularity and the similarity hypothesis,' *The Journal of Consumer Research*, 9(1), 90-8.

Shafir, Eldar, Itamar Simonson, and Amos Tversky (1993), 'Reason-based choice,' *Cognition*, 49 (1-2), 11-36.

## Class 3: Friday, February 1: Decision-making under Uncertainty, I

Social comparisons, satisfaction with choice, anchoring, representativeness (law of small numbers, conjunction fallacy, base-rate neglect).

#### **Essential reading**

Ivengar, S.S. and M.R. Lepper (2000), 'When Choice is Demotivating: Can One Desire Too Much of a Good Thing?' *Journal of Personality and Social Psychology*, 79 (6): 995-1006.

Tversky, Amos and Daniel Kahneman (1974), 'Judgment under uncertainty: Heuristics and biases,' *Science*, 185 (4157), 1124-31.

## Additional reading

Tversky, Amos and Daniel Kahmeman (1971), 'Belief in the law of small numbers,' *Psychological Bulletin*, 76(2), 105-110.

Tversky, Amos and Daniel Kahneman (1983), 'Extensional versus intuitive reasoning: The conjunction fallacy in probability judgment,' *Psychological Review*, 90(4), 293-315.

Bar-Hillel, Maya (1980), 'The base-rate fallacy in probability judgments,' *Acta Psychologica*, 44(3), 21-33.

# Class 4: Friday, February 8: Decision-making under Uncertainty, II

Confirmation bias, availability, overconfidence, hindsight bias.

## Essential reading

Nickerson, Raymond S. (1998), 'Confirmation bias: A ubiquitous phenomenon in many guises,' Review of General Psychology, 2(2), 175-220.

Angner, Erik (2006), 'Economists as experts: Overconfidence in theory and practice,' *Journal of Economic Methodology*, 13(1), 1-24.

Fischhoff, Baruch (1975), 'Hindsight is not equal to foresight: The effect of outcome knowledge on judgment under uncertainty,' *Journal of Experimental Psychology: Human Perception and Performance*, 1(3), 288-99.

#### Additional reading

Kruger, Justin and David Dunning (1999), 'Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments,' *Journal of Personality and Social Psychology*, 77(6), 1121-34.

## Class 5: Friday, February 15: Decision-making under Uncertainty, III

Expected value, expected utility, framing, bundling, mental accounting, certainty effect, probability weighting.

#### Essential reading

Tversky, Amos and Daniel Kahneman (1981), 'The framing of decisions and the psychology of choice,' Science, 211(4481), 453-58.

Thaler, Richard H. (1985), 'Mental accounting and consumer choice,' *Marketing Science*, 4(3), 199-214.

#### Additional reading

Tversky, Amos and Daniel Kahneman (1986), 'Rational choice and the framing of decisions,' *The Journal of Business*, 59(4), S251-78.

# Class 7: Friday, March 1: Intertemporal Choice

Hyperbolic discounting, peak-end rule, hot-cold empathy gap, impact bias, focusing illusion.

## Essential reading

Loewenstein, G. and R. Thaler (1989), 'Anomalies: Intertemporal Choice,' *Journal of Economic Perspectives*, 3: 181-193.

Redelmeier, Donald A. and Daniel Kahneman (1996), 'Patients' memories of painful medical treatments: Real-time and retrospective evaluations of two minimally invasive procedures,' *Pain*, 66(1), 3-8.

Ariely, Dan and George Loewenstein (2006), 'The heat of the moment: The effect of sexual arousal on sexual decision making,' *Journal of Behavioral Decision Making*, 19(2), 87-98.

#### Additional reading

Gilbert, Daniel T., Pinel, Elizabeth C., Wilson, Timothy D., Blumberg, Stephen J., Wheatley, Thalia P. (1998), 'Immune neglect: A source of durability bias in affective forecasting,' *Journal of Personality and Social Psychology*, 75(3), 617-638.

Kahneman, Daniel (2011), Thinking Fast and Slow, London: Allen Lane. (pp. 402-406).

## Class 8: Friday, March 8: Behavioural Game Theory + Group presentations

Ultimatum game, dictator game, social preferences, fairness, trust game, beauty contest

## Essential reading

Camerer, C.F. (1997), 'Progress in Behavioral Game Theory,' *The Journal of Economic Perspectives*, 11(4): 167-188.

#### Additional reading

Solnick, Sarah J. and Maurice E. Schweitzer (1999), 'The Influence of Physical Attractiveness and Gender on Ultimatum Game Decisions,' Organizational Behavior and Human Decision Processes, 79(3), 199-215.

# Class 9: Friday, March 15: Decision-Making and Language + Guest Speaker Linguistic-savings hypothesis

# Essential reading

Chen, Keith M. (2013), 'The Effect of Language on Economic Behavior: Evidence from Savings Rates, Health Behaviors, and Retirement Assets,' *American Economic Review*, 103 (2): 690-731.

#### Additional reading

Keysar, Boaz, Hayakawa, Sayuri L., and An, Sun Gyu (2012), 'The Foreign-Language Effect: Thinking in a Foreign Tongue Reduces Decision Biases,' *Psychological Science*, 23(6), 661-668.

# Class 10: Friday, March 22: Libertarian Paternalism and the Nudge Agenda + Guest Speaker

Behavioral welfare economics, asymmetric paternalism.

#### Essential reading

Sunstein, Cass R. (2014), 'Nudging: a very short guide,' Journal of Consumer Policy, 37(4), 583-588.

#### Additional reading

Loewenstein, George and Peter Ubel (2010), 'Economists behaving badly,' *The New York Times*, July, p. A31.

#### Class 11: Friday, March 29: Course wrap-up + Guest Speaker