Behavioural Decision Making I: Attention, Experience and Influence

2023-2024 Academic Year
Master of Research in Economics, Finance and Management

1. Description of the subject

- Behavioural Decision Making I: Attention, Experience and Influence
- Code: 32587
- Total credits: 6 ECTS   Workload: 150 hours
-                                 Term: 2nd
- Type of subject: Optative
- Department of Economics and Business
- Teaching team: Gael Le Mens

2. Teaching guide

⚙ Introduction

People routinely make choices in complex environments they do not fully understand. In such settings, they cannot consciously evaluate the available alternatives on all their attributes and then make a utility-maximizing choice. Nevertheless, people still make choices and bear the consequences of these choices. How do they manage to do this? In this research seminar, you will learn the foundations of the academic field that focuses on this question: Behavioral Decision Making. The field has been pivotal in the development of behavioral economics and recent Nobel Laureates who contributed to it include Daniel Kahneman (2002) and Richard Thaler (2017).

Traditional behavioral economics courses focus on judgment and decision errors and how they systematically deviate from the prescriptions of rational model. In this course, I will present a different perspective that emphasizes the links between learning and decision making. The idea that to understand judgments and decisions, one should analyze the context of learning that comes before such judgments and decisions. We will see that, once we incorporate learning and experience in our analytical framework, the picture that emerges is much more positive about human abilities than what is implied by the traditional perspective: human judgments and decisions are highly adaptive to the environments in which people evolve, especially in situations in which we repeatedly encounter similar contexts and can learn from feedback.

After taking this course, you will have acquired new conceptual frameworks and tools that are useful for the generation of innovative research ideas in fields such as micro-economics, applied and political economics, finance, or management. This course is also relevant if you plan to work in the industry in areas in which understanding and predicting how consumers and citizens will react to the introduction of new policies, technologies, services or products is important.

This class can be taken by MSc students from the BSE and by MRES students. It can be taken **individually**, as a pair of courses together with Behavioral Decision Making II, or as part of the **behavioral economics and decision-making track**. More information on this track is provided below, in section 4.

⚙ Teaching methodology

The course has a research focus. The teaching methodology will consist in lectures, in-class experiments, class discussions, and presentations of recent papers. You will have weekly assignments that ask you to critically engage with what you read in one of the assigned paper, program some simple computer simulations of a decision or judgment model (in the language of your choice, python, matlab, R, excel…), and / or analyze experimental or field data.

The material will be posted in the course Box folder.

Pre-requisites: ability and motivation to think in terms of formal models, working knowledge of a high-level programing language (e.g., python, R, matlab).

Evaluation:

- Research project: 60%. The main component of the evaluation will be based on one research project to be written up and presented in class at the end of the course. The research project should consist of an original idea that fits within the topic of the course, and that could potentially be converted into a full-fledged research paper. The content can be theoretical, empirical, or experimental, or a combination of these approaches. Each student must meet with me for approval of the chosen topic.

- Oral contribution to in-class discussion (including paper presentation / discussion): 40%

There will be no exam in this course.

⚙ Course Logistics

Course attendance: **Attendance to the in-class sessions** is **mandatory**. The session will start 10 mins after the official time. Please make sure to be in class before this time and use a **name tag** so that I can learn your names.

Deliverables for the project

Three in class presentations:
- Research question (S8)
- Presentation of working plan for the project implementation (S13)
- Final project presentations (S19)

Final paper (up to 3000 words + appendix) to be due at the end of the trimester (date to be determined)

⚙ Topics covered (tentative)

1. **Introduction**
2. **What is a good decision?**
3. **What is a correct judgment?**
4. **Framing effects**
5. **Heuristics – Question Substitution – Representativeness, Availability, Anchoring**
6. **Good and bad research questions**
7. **The Bias Bias**
8. **Discovering, acquiring and combining information**
9. **Overconfidence**
10. **Multi-attribute choices – multi-cue judgments**
11. **Performance of human judges vs algorithms**
12. **Information search; exploration-exploitation**
13. **Deciding how to decide – accuracy vs effort**
14. **The Drift Diffusion Model**
15. **Unit effects in evaluative judgments**
16. **Concepts, categories and evaluative judgments**
17. **Using Large Language Models to measure semantic similarity (BERT, GPT-X, LLaMA, …)**
18. **Cognitive dissonance and motivated cognition**
19. **Learning from experience, hot-stoves, hot-kitchens, and negativity biases.**
20. **Collective evaluations, recommender systems**
21. **Social influence, popularity dynamics**
22. **Opinion formation and expression on social media**

3. Bio of Instructor

Gaël Le Mens is a Full Professor in the Department of Economics and Business at UPF. His research focuses on learning by individuals and organizations and the use of Large Language Models (BERT, GPT-4, …) to measure the similarity between objects, concepts and categories. Several his papers explain how individuals might develop and maintain inaccurate beliefs because they rely on the biased samples of information they obtain from their experiences. In related projects on the dynamics of social processes, he has examined the development of technological trajectories, the evolution of cultural tastes and their consequences for organizational viability, the evolution of organizational inertia and dynamics of organizational failure. He is the holder of a €1.2M ERC Consolidator grant on belief and attitude change. Gaël's research has been published in top scientific journals such as the Proceedings of the National Academy of Science of the USA (PNAS), Psychological Review, Psychologcial Science, the Journal of Personality and Social Psychology, Cognition, Behavioral and Brain Sciences, Organization Science, Management Science, Administrative Science Quarterly, Sociological Science and the American Journal of Political Science. Popular accounts have appeared in the New York Times, the Times (London), WSJ.com, FT.com, USA Today, ABCNews.com, Focus and other in-print and online periodicals. He has taught graduate courses at UPF, INSEAD, London Business School, ESADE, and the University of Lugano in Switzerland. He has given invited lectures at Stanford, MIT and IESE.

4. Behavioral economics and decision-making track.

Fall term (September – December)

- Topics in Economic Theory: Behavioral Decision Theory (I and II, taught by [Larbi Alaoui](#) and [Jose Apesteguia](#)).

Winter term (January – March)

- Behavioral Decision Making I: Attention, Experience and Influence (taught by [Gaël Le Mens](#))

Spring term (April – June)

- Behavioral Decision Making II: The Psychology of Economics Decisions (taught by [Daniel Navarro-Martinez](#)).
- Experimental Economics (taught by [Rosemarie Nagel](#))

These courses cover different, and complementary, approaches to analyzing decision making. Topics in Economic Theory: Behavioral Decision Theory (I and II) falls within behavioral economics and decision theory, and focuses on modeling behavioral phenomena that do not fall within standard rational choice theory. Behavioral Decision Making I: Attention, Experience and Influence focuses on how attentional processes, past experiences, the social environment, and recommendation systems affect beliefs and preferences. Behavioral Decision Making II: The Psychology of Economics Decisions draws from research in both behavioral economics and psychology to investigate topics such as preference reversals, self-control, the role of emotions in decision making, and choice architecture. Experimental Economics teaches methods used in the field of experimental economics and discusses experiments that focus on interactive situations.