

Experimental Methods in Economics

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Credits: 3, 18 hours

Term: fall

Course description

The course introduces experimental methodologies used in economics to investigate economic agents' characteristics and behaviour, non-standard preferences, and strategic interactions and to test behavioural interventions and policies. The course covers laboratory, field, and survey experiments, and lectures are devoted to discussing the pros and cons of each methodology with a “hands-on- experiments” approach, i.e., via classroom experiments and analysis of selected papers and results. The main goal is to provide the methodological skills required to critically understand experimental research and the basics needed to design and conduct an experiment to answer specific research questions.

Prerequisites

Prior knowledge of the field is not required; some familiarity with game theory and behavioural economics is helpful, though not essential.

Teaching methods

Each methodology will be introduced via a classroom experiment and the discussion of selected papers. Students can join the classroom experiment with any device with an active internet connection (smartphones and tablets are preferred).

Assessment

The course will have two main requirements:

- Attendance and in-class participation
- Research design. During the course, students will choose a research question and propose a research design to address it. Students will have complete freedom in selecting the research question: it can be related to their PhD thesis or the topics presented in class or simply fall in their personal interests, as long as an appropriate motivation is provided. The proposed design must involve at least one of the methodologies seen during the course, with design choices appropriately motivated.

Topics and main references

1. Why experiments in Economics?

🕒 *Overview of experimental methods; the trade-off between control and representativeness*

📖 Smith, V. L. (1994). Economics in the Laboratory. *Journal of economic perspectives*, 8(1), 113-131.

2. Decision-making processes and individuals in isolation

🕒 *Measuring risk and intertemporal preferences*

📖 Holt, C. A., & Laury, S. K. (2002). Risk aversion and incentive effects. *American economic review*, 92(5), 1644-1655.

3. Interacting with others

🕒 *Laboratory experiments and social preferences; simulating interactions in non-interactive settings; direct Vs strategy method*

📖 Levitt, S. D., & List, J. A. (2007). What do laboratory experiments measuring social preferences reveal about the real world?. *Journal of Economic perspectives*, 21(2), 153-174.

4. Design choices, treatments and their consequences on data analysis

4.1 🕒 *Anonymity, framing and the demand effect*

4.2 🕒 *One-shot Vs repeated games; between Vs within subjects designs; order effect*

4.3 🕒 *Experimentics: econometrics with experimental data; treatment testing; power*

📖 Selected chapters in Moffatt (2020, 2021)

5. Survey experiments

📖 Stantcheva, S. (2023). How to run surveys: A guide to creating your own identifying variation and revealing the invisible. *Annual Review of Economics*, 15, 205-234.

6. Good practices in (experimental) research

🕒 *Pre-registrations; hypotheses; ethical concerns and institutional review board approvals;*

replication packages

☞ Page, L., Noussair, C. N., & Slonim, R. (2021). The replication crisis, the rise of new research practices and what it means for experimental economics. *Journal of the Economic Science Association*, 7, 210-225.

Additional references

General

Croson, R., & Gächter, S. (2010). The science of experimental economics. *Journal of Economic Behavior & Organization*, 73(1), 122-131.

Falk, A., & Heckman, J. J. (2009). Lab experiments are a major source of knowledge in the social sciences. *Science*, 326(5952), 535-538.

Methodology

Dohmen, T., Falk, A., Huffman, D., Sunde, U., Schupp, J., & Wagner, G. G. (2011). Individual risk attitudes: Measurement, determinants, and behavioral consequences. *Journal of the European Economic Association*, 9(3), 522-550.

Field experiments

Levitt, S. D., & List, J. A. (2009). Field experiments in economics: The past, the present, and the future. *European Economic Review*, 53(1), 1-18.

Cohn, A., Maréchal, M. A., Tannenbaum, D., & Zünd, C. L. (2019). Civic honesty around the globe. *Science*, 365(6448), 70-73.

Survey experiments

Kuziemko, I., Norton, M. I., Saez, E., & Stantcheva, S. (2015). How elastic are preferences for redistribution? Evidence from randomized survey experiments. *American Economic Review*, 105(4), 1478-1508.

Experiments and design choices

List, J. A., Sadoff, S., & Wagner, M. (2011). So you want to run an experiment, now what? Some simple rules of thumb for optimal experimental design. *Experimental Economics*, 14, 439-457.

Moffatt, P. (2021). Experiments: A Survey. *Foundations and Trends in Econometrics*: Vol. 11, No. 1–2, pp 1–152. See also Moffatt, P. (2020). Experiments: Econometrics for experimental economics. Bloomsbury Publishing