

Discipline: Methods Course

1 Language

English

2 Title

Experimental Research and Behavioral Decision Making

3 Lecturer

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Christian D. Schade is a full professor at Humboldt University's School of Business and Economics and holds the chair of Entrepreneurial and Behavioral Decision Making. His research contributes to a better understanding of decision making in general and of entrepreneurial as well as innovative decision making. He is currently working on novel foundations and perspectives for the decision sciences. His research is mainly based on laboratory experiments, economic psychology and mathematical psychology, as well as quantum mechanics.

4 Date and Location

26.-29.09.2023

Humboldt-Universität zu Berlin

Wirtschaftswissenschaftliche Fakultät

Spandauer Straße 1

10178 Berlin

5 Course Description

5.1 Abstract and Learning Objectives

Various robust deviations from rational decision making have been reported such as loss aversion, probability weighting, status quo bias, overconfidence etc. Understanding those deviations leads to a more realistic modelling of the behavior of different economic actors and to an increased prediction success. In this course, participants will understand those and other important deviations from rationality as well as their theoretical explanations/modelling, e.g., prospect theory and mental accounting. Most theories have been developed implementing psychological and economic experiments. Whereas psychological experiments are mostly asking the respondents for hypothetical choices, real decisions with actual monetary payoffs are implemented in economic experiments. Half of the course will be concerned with a profound introduction to several deviations from rationality that have been reported with real decision makers, with the theoretical treatment of those deviations, as

well as with a definition of experimental research and with the basic features of experiments. The other half of the course will analyze different selected papers (potentially including some planned projects by participants) and always addresses the match between research question and empirical method (mostly: type of experiment) to be used.

5.2 Content

Whereas the first two days take the form of an interactive lecture and are mostly devoted to laying the basic knowledge in experimental research and behavioral decision theory, the next two days are devoted to specific applications of behavioral decision theory and experimental research to selected topics in tax compliance, behavioral finance, behavioral insurance, entrepreneurial decisions, venture financing decisions, and consumer behavior. Whereas not all areas of business research are captured in the example studies, the applications are diverse as well as broad enough to have participants from different fields benefit from this course. Also, within this second part of the course, the space will be opened up for up to four own projects of participants, on a first come-first served basis (start and end date to be announced), reducing, in turn, the number of pre-selected papers to be presented.

5.3 Schedule (including start and end time)

Day I: (26.09.2023)

10:00 – 10:30	Arrival of participants, reception, check-in and introduction
10:30 – 12:00	Short intro to normative versus behavioral decision and game theory as well as experimental versus non-experimental empirical research; distribution of presentation topics for days 3 and 4.
12:00 – 13:00	Lunch break
13:00 – 14:30	Standard prospect theory, status quo bias and exit inertia
14:30 – 14:45	Short break
14:45 – 16:15	Mental accounting and overconfidence
16:15 – 16:45	Coffee break
16:45 – 18:15	Behavioral game theory: coordination despite multiple Nash equilibria

Day II: (27.09.2023)

09:30 – 11:00	What is an experiment?
11:00 – 11:15	Coffee break
11:15 – 12:45	Characteristics of different experimental designs
12:45 – 13:45	Lunch break
13:45 – 15:15	Economic versus psychological experiments
15:15 – 15:45	Coffee break
15:45 – 17:15	Matching research question and empirical method (theory)

Day III: (28.09.2023) (schedule/content may change due to participants' own projects' presentations)

09:30 – 11:00	Presentations of the papers by Chan and Park (2015) as well as Franke et al. (2006)
11:00 – 11:15	<i>Coffee break</i>
11:15 – 12:45	Presentations of the papers by Camerer and Lovallo (1999) as well as Koellinger et al. (2007)
12:45 – 13:45	<i>Lunch break</i>
13:45 – 15:15	Presentations of the papers by Charnes and Gneezy (2010) as well as Biliciler et al. (2022)
15:15 – 15:45	<i>Coffee break</i>
15:45 – 17:15	Presentations of the papers by Schade et al. (2012) as well as Zimmer et al. (2018)

Day IV: (29.09.2023) (schedule/content may change due to participants' own projects' presentations)

09:30 – 11:00	Presentations of the papers by Schwartz et al. (2002) as well as Schade and Snir (2020)
11:00 – 11:15	<i>Coffee break</i>
11:15 – 12:45	Presentations of the papers by Hallsworth et al. (2014) as well as Selten et al. (2007)
12:45 – 13:45	<i>Lunch break</i>
13:45 – 15:15	In-class exam (optional)
15:15 – 15:45	Wrap-up & Feedback

5.4 Course format

The course will consist of an interactive lecture (first two days), followed by a seminar part (last two days) where participants either present part of their own research (up to four such projects) or pre-selected papers and their possible extensions (future research). Whenever appropriate, publication strategies will also be discussed. An optional final exam will be provided. Lecture as well as seminar part are based on classical as well as more recent journal articles and working papers. The course will be held in English.

Selected literature (classics)

Friedman, D., Sunder, S. (1994): *Experimental methods: A primer for economists*. Cambridge University Press, Cambridge (UK) and New York (USA).

Gigerenzer, G., Todd, P. M. and the ABC Research Group (1999): *Simple Heuristics That Make Us Smart*. Oxford University Press, Oxford (UK).

Kahneman, D. and Tversky, A. (1979): Prospect theory: An analysis of decision under risk. *Econometrica* 47, 263-291.

6 Preparation and Literature

6.1 Prerequisites

Master-level education in business, economics, or psychology.

6.2 Essential Reading Material

6.2.1 Reading Material (lecture)

An intensive study of this part of the literature as well as the literature referenced under “selected literature” is obligatory for all participants before the start of the class.

Camerer, C. F. and Lovallo, D. (1999): Overconfidence and excess entry: An experimental approach. *American Economic Review* 89, 306-318.

Campbell, D. T. and Stanley, J. C. (1963): *Experimental and quasi-experimental designs for research*. Houghton Mifflin Company, Boston.

Kahneman, D. and Tversky, A. (1979): Prospect theory: An analysis of decision under risk. *Econometrica* 47, 263-291.

Samuelson, W. and Zeckhauser, R. (1988): Status quo bias in decision making. *Journal of Risk and Uncertainty* 1, 7-59.

Sandri, S., Schade, C. D., Mußhoff, O., and Odening, M. (2010): Holding on for too long? - An experimental study on inertia in entrepreneurs' and non-entrepreneurs' disinvestment choices. *Journal of Economic Behavior and Organization* 76, 30-44.

Schade, C. D. (2005): Dynamics, experimental economics and entrepreneurship. *Journal of Technology Transfer* 30, 409-431.

Schade, C. D., Schröder, A., and Krause, K. (2010): Coordination after Gains and Losses: Is Prospect Theory's Value Function Predictive for Games? *Journal of Mathematical Psychology* 54, 426-445.

Shefrin, H. M. and Statman, M. (1985): The disposition to sell winners too early and ride losers too long: theory and evidence. *Journal of Finance* 40, 777-792.

Thaler, R. H. (1985): Mental accounting and consumer choice. *Marketing Science* 4, 199-214.

6.2.2 Reading material and work load (for the seminar part)

The work load somewhat (but not primarily) depends on how many participants will be in the course. The numbers provided in the following assume a normal number of participants (the course is typically full or almost full). Whereas it is assumed that everyone is having a deeper look into all of the following articles, each of the participants should prepare two or three of these papers more intensively and be able to contribute competently to the discussion in class. This also applies to those that present their own projects. The participants presenting their own work (plus, perhaps, one pre-selected paper) as well as those only presenting pre-selected papers (maximum two) are fixed before the start of the class. Please email me your preferences for different pre-selected papers as well as your wish to present your

own work *not earlier than August 1, 2023, 12:00 noon and not later than August 31st 2023, 12:00 h*). I will need either (a) your wish to present your own work together with title and abstract as well as a quick sketch of the type of experiment you plan to run (I will take the freedom to select out non-experimental work, extremely early-stage work or completed work, where no changes in the experiment are possible, anymore, overwriting the otherwise first come-first served selection), as well as a list with a ranking of 4-5 papers (from the following list) you would like to present (if another presentation turns out to be necessary and/or you are not selected to present your work) or (b) just that list of papers together with your ranking (if you do not want to present your own work), and I will come back to you with either a decision on whether you can present your project and/or one or two papers I would like you to prepare for presentation in class. For that paper(s), please give a short overview of the research question(s) the paper is trying to address, the methodology pursued, as well as the implications and limitations. The same content needs to be provided also in the presentation of your own work (with potential implications replacing implications).

Biliciler, G., Raghunathan, R. and Ward, A. F. (2022): Consumers as Naive Physicists: How Visual Entropy Cues Shift Temporal Focus and Influence Product Evaluations. *Journal of Consumer Research* 48, 1010–1031.

Camerer, C. F. and Lovallo, D. (1999): Overconfidence and excess entry: An experimental approach. *American Economic Review* 89, 306-318.

Chan, C. S. R., & Park, H. D. (2015): How images and color of business plans influence venture investment screening decisions. *Journal of Business Venturing* 30, 732-748.

Charness, G. Gneezy, U. (2010): Portfolio Choice and Risk attitudes: An Experiment. *Economic Inquiry* 48, 133-146.

Franke, N., Gruber, M., Harhoff, D., Henkel, J. (2006): What you are is what you like: similarity biases in venture capitalists' evaluations of start-up teams. *Journal of Business Venturing* 21, 802-826.

Hallsworth, M., List, J., Metcalfe, R., Vlaev, I. (2014) (NBER Working Paper No. 20007): The Behavioralist As Tax Collector: Using Natural Field Experiments to Enhance Tax Compliance.

Koellinger, P., Minniti, M., and Schade, C. (2007): "I think I can, I think I can": Overconfidence and entrepreneurial behavior. *Journal of Economic Psychology* 28, 502-527.

Schade, C., Kunreuther, H. C., and Koellinger, P. (2012): Protecting Against Low-Probability Disasters: The Role of Worry. *Journal of Behavioral Decision Making* 25, 534-543.

Schade, Christian D. und Snir, Avichai (2020): A lab test on the decision not to decide. *Business Research* 13, 1253-1291.

Schwartz, B., Ward, A., Monterosso, J., Lyubomirsky, S., White, K., Lehman, D. (2002): Maximizing Versus Satisficing: Happiness is a Matter of Choice. *Journal of Personality and Social Psychology* 83, 1178-1197.

Selten, R., Chmura, T., Pitz, T., Kube, S., Schreckenberg, M. (2007): Commuters route choice behavior. *Games and Economic Behavior* 58, 394-406.

Zimmer, Anja, Gründl, Helmut, Schade, Christian D. und Glenzer, Franca (2018): An incentive-compatible experiment on probabilistic insurance and implications for an insurer's solvency level. *Journal of Risk and Insurance* 85, 245-273.

6.3 To prepare

All participants are required to read the essential reading material (underlying the lecture), send in their preference ordering for the pre-selected papers for the seminar part, as well as well as conduct the additional work described in much more details in the last section.

7 Administration

7.1 Max. number of participants

The number of participants is limited to 20.

7.2 Exam

A 90-minute in-class exam will be offered at day IV (optional).

7.3 Credits

The course (including the exam) corresponds to a scope of 6 LP/ECTS

8 Working Hours

Work components	hours
Readings from literature list (“selected literature” and “reading material (lecture)” from syllabus); this partially prepares for the written exam (see below)	70.0
Intensive preparation of two or three pre-selected papers for the seminar	40.0
Preparation of presentation(s)	40.0 (av.)
Participation in class and exams	22.5
Revision of overheads for own presentation(s) based on learnings in class (evenings)	2.5
Additional preparations for written exam, based on content covered in class (evenings)	5.0
Total	180 h