

Project Seminar: Experimental Economics

Creativity at work – How the work environment affects creativity

Winter Semester 2019/2020

**First Meeting & Preliminary Discussion
on Wednesday, October 16, 2019, 13:15
in room LG 5.430**

Over the last decades, an increasing number of jobs have required workers to think “out of the box” and solve problems creatively. Creativity is especially important for the development of innovative products and services. This seminar tackles the question if and to what extent different work environments shape the creativity in non-routine tasks. Aside from the challenge of measuring creativity, the seminar aims at identifying relevant set-ups and investigating their effect on creativity.

The objective of the seminar is the development, execution, and analysis of an experimental research project. This includes the development of an adequate research question, designing an experiment to investigate this question, the technical implementation of the design as well as actually conducting the experiment in the experimental laboratory (LERN), and the statistical analysis of the results. The goal of the seminar is to get to know the method of experimental economics and to get a comprehensive overview of the single steps an experimental project entails. By developing a very own small research project the seminar relates closely to scientific practice.

In a first step, the students develop an experimental research question within the framework of the seminar. Further steps include the development of the experimental design, programming and organizing the experiment, and the analysis of the experimental data. The workload of the seminar will be distributed among small groups. Accompanying the seminar there will be a brief introduction to z-Tree, the most commonly used experimental software, and to non-parametric statistics which is usually needed to analyze experimental data with small sample size. The experiment will be conducted in the Laboratory for Experimental Research Nuremberg (LERN). In a last step, the seminar participants will analyze the data and summarize the project in a joint paper.

The seminar is open to Master and Doctoral students. The seminar grades will be based on the individual contributions to the design development, data analysis and the final paper summarizing the project. Additionally, there will be a short compulsory homework assignment about the introduction to programming and non-parametric statistics. The seminar should result in a first joint research paper.

Summary of the seminar's **main objectives**:

- Transformation of the research question into an experimental design
- Introduction to programming with z-Tree
- Preparation and execution of the experiment
- Introduction to non-parametric statistics
- Analysis of the experimental data

If you are interested in participating please send in advance a brief application email stating your field of studies and topics you may be interested in to Michael Seebauer (michael.seebauer@fau.de).

The planned schedule for the seminar is as follows:

- First Meeting & Preliminary Discussion: Wednesday, October 16, 2019 at 13:15 in room LG 5.430

During the semester we will meet on a regular basis every two weeks starting in calendar week 42; the major milestones will be (subject to change):

- Discussion of the research question and the experimental approach (calendar week 42)
- Development of the experimental design and implementation of the experimental software (calendar week 46)
- Testing of the experimental program in the laboratory (calendar week 48)
- Conducting the experiment in the laboratory (calendar week 50)
- Preliminary discussion of experimental results (calendar week 3)
- Final discussion of the project including paper draft (calendar week 5)
- Paper submission deadline (February 29, 2020)

We are looking forward to your participation!

Literature

Experimental methods

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Creativity

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