

## **Quantitative Research Methods for Social Work and Social Sciences**

### **Block 2: Practical exercises with real world data**

#### **Teaching**

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#### **Organisation**

September 11 – 14, 2023, 9h15-13h ; 14h-17h00

#### **Content**

Research in social science has the aim to improve our understanding of how humans interact with society and with each other. At the beginning of a research project, there is often a specific research question. To answer such a question, there are a large range of different approaches and methods in social science research, including qualitative and quantitative approaches (Sheppard, 2020; Field 2017). Both approaches have their merit and mixed-method approaches can be very useful to fully understand a problem. Some researchers will choose qualitative approaches in their future career, however, even for those it is important to understand and critically reflect upon studies based on quantitative research. The best way to understand quantitative methods is often to give it a try yourself, and this is what this seminar is about.

In this four-day course, participants will be guided through the process of developing and answering a research question of their own interest using quantitative methods. It will start with developing a research question, choosing an appropriate statistical method and to present and interpret the result. At the end, the aim is to answer the original question and to critically reflect about the limitations of the analysis conducted, and eventually deduce further research questions.

While this is a rather practical course, some theoretical inputs will be interweaved. Given the possibly large differences in methodological and statistical background in the participants, these inputs will be adapted to participants' interests and level of knowledge. As this course will be the second seminar block on quantitative methods, it is also possible to discuss questions that need further elaboration after the first seminar block. Participants will be asked to indicate their preferences on theoretical and practical inputs in a short survey in June 2023.

The software used in the course will be SPSS and/or R, depending on participants' preferences.

### **Evaluation forms**

Present results of own analysis in the class

### **Learning goals**

To reflect about the advantages and disadvantages of quantitative methods in social science

To set up a quantitative survey questionnaire

To formulate an own research question and hypothesis

To choose an appropriate statistical analysis and reflect about of the assumptions of the analysis

To prepare data for analysis and choose appropriate descriptive statistics

To carry out a statistical analysis

To interpret and present results

To reflect about limitations of the analysis conducted

### **Transferable competences**

To be able to better understand and critically evaluate quantitative papers.

### **Recommended datasets:**

Participants are encouraged to use a data set linked to their own work or interests. There are many open datasets available, including those of most SNF-funded studies. Examples for publicly available datasets are below:

European Social Survey <https://www.europeansocialsurvey.org/>

Eurobarometer: Public opinion pools in the EU.

<https://europa.eu/eurobarometer/screen/home>

Cohort Study on Substance Use Risk Factors: Swiss cohort study with about 6000 young men. This was the main data set of my former job.

<https://doi.org/10.5281/zenodo.5469953>

### **Literature**

Sheppard, V. (2020). Research methods for the social sciences: an introduction. Vancouver: BCCampus.

<https://pressbooks.bccampus.ca/jibcresearchmethods/> (Open Access)

Field, A. (2017). Discovering statistics using IBM SPSS statistics. Fifth edition. Sage publications

Field, A., Miles, J., & Field, Z. (2012). Discovering statistics using R. Sage publications.

Note: Andy Fields Youtube channel is also a great resource:

<https://www.youtube.com/@ProfAndyField/videos>

Döring & Bortz 2016 Forschungsmethoden und Evaluation in den Sozial- und Humanwissenschaften. Springer Verlag.