Syllabus

Adalbert Wilhelm

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Course Number:990212

Secondary Data Analysis

Instructor: Adalbert Wilhelm

Research IV, Room 111, phone - 3402, e-mail: a.wilhelm@jacobs-university.de
Office hours: Tuesday, 13:30 - 14:30 and by appointment

Partial Grades:

- Active Participation (30%)
- Project (70%)

Course description:

It is not always necessary to collect data from scratch. Large data sets available for general use already exist both inside and outside academia. This course on Secondary Data Analysis is a project-based introduction to the problems and techniques involved in secondary data analysis, that is, to the reanalysis of existing data sets with techniques or research questions different from those of the original investigation.

Students will work together in teams of three and work through the full process of secondary data analysis. The primary focus of the course will be on

1. Developing (a) suitable research question(s)

2. Determining relevant indicators and variables
3. Finding relevant data sources and getting access to data
4. Data Preparation
5. Data Analysis
6. Presenting the work progress and the findings in a short video (about 8 min long)

The topics to be treated are subject to students' preferences. They shall refer to existing academic publications or general discussions in society. Potential topics could be (but are not restricted to):

1. Financial Markets
2. UN Millennium goals
3. Environmental pollution
4. Traffic delays
5. Health issues and hospital quality
6. University Rankings
7. Cross-national education surveys (TIMSS, Pisa)
8. War and conflict studies
9. Values, Culture and Society
10. Text authorship and other quantitative comparisons of texts
11. Market research

Students will be guided through the various steps by getting both the theoretical background as well as the practical experience of data analysis. The learning outcomes should be a complete understanding of a secondary data analysis project as well as knowledge and expertise in the individual steps. Suitable statistical techniques will be introduced and presented on demand.

Teambuilding

Each team will consist of three students. While the project is a team effort and requires that all members cooperate and contribute to all aspects of the projects, each student will take special responsibility for one of the following roles:

- content expert
- data specialist and analysis expert
- project manager and production expert

Deliveries

In Week 4 (due date: Tuesday, September 23, 2014) each group delivers a two-page research proposal including a project plan that defines individual milestones. As final report each group produces a short video (about 8 minutes long) presenting the research topic, data, analysis methods and the findings (due date: Tuesday, November 18, 2014).

Total contact hours: 35 h

Total Workload: 125 hours, i.e. 5 ECTS

Prerequisites:

Stats I and II OR Statistical Concepts and Data Analysis or by instructor approval

Text:

There is no textbook for this course. Recommended background reading: Trzesniewski et al. [2010], Smith [2008], Bulmer et al. [2009]

Schedule:

Week 1 General introduction, discussion of topics, team building

Week 2 Developing a research question, Data Archives

Week 3 Operationalization, Finding proxies

Week 4 Research Proposal and more Data Sources

Week 5 Data Preparation

Week 6 Data Analysis I

Week 7 Data Analysis II

Week 8 Data Analysis III

Week 9 Short Presentation of Preliminary Results

Week 10 Fine-tuning the analysis I

Week 11 Fine-tuning the analysis II

Week 12 Project presentations (video)

Week 13 Project reflection and critique

Week 14 Directors' cut, course reflection and critique

References

Martin Bulmer, Patrick J. Sturgis, and Nick Allum. *The secondary analysis of survey data (four-volume set)*. Sage, February 2009. URL `http://eprints.soton.ac.uk/64633/`.

E. Smith. *Using Secondary Data in Educational and Social Research*. Conducting educational research. Open University Press, 2008. ISBN 9780335223589. URL `http://books.google.de/books?id=IHonAQAAIAAJ`.

K.H. Trzesniewski, B. Donnellan, R.E. Lucas, and American Psychological Association. *Secondary data analysis: an introduction for psychologists*. American Psychological Association, 2010. ISBN 9781433808760. URL `http://books.google.de/books?id=hPwkAQAAMAAJ`.