JUSTUS-LIEBIG-
UNIVERSITÄT
GIESSEN

GGS
Gießener Graduiertenzentrum
Sozial-, Wirtschafts- und Rechtswissenschaften

Blended Learning Workshop

Multilevel Modelling

Organizational Details

Instructor: Prof Dr Elmar Schlüter

Live-Meetings: August 10 and 24, 2020, 2 to 5 p.m. respectively

Location: Live Meetings will be moderated using Microsoft Teams.

ECTS: 3 ECTS

Participants: 15

Objectives

The primary objective of this course is to provide participants with a proper understanding and the practical skills necessary for applying linear regression modelling techniques to hierarchically ordered multilevel data structures. Core topics of the course include random intercept & slope models, contextual effect models, cross-level interaction models, and further topics. In order to put these different techniques to practice, participants will become proficient in the use of the SPSS and/or Mplus statistical software. Throughout the course, emphasis lies on ways of achieving an adequate balance between theoretical assumptions, methods of data analysis, and interpretation of the results. To facilitate the transfer of theoretical knowledge into participants' own research, a large part of the course will be devoted to systematic exercises using freely available survey data. Participants are encouraged, however, to also use their own data.

Content

The workshop will deal with topics such as:
- Conceptual and statistical foundations of hierarchical linear models
- Intercept-and-Slope-as-Outcome-models
- Contextual effect models

The course is subdivided in two parts. Each part will be taught using both asynchronous and synchronous online learning modules. The asynchronous modules will be available via ILIAS. For the the Live-Meetings we will use MS Teams. The course will be taught using the student version of Mplus 8, which is perhaps the most flexible software available for modelling multilevel structures:

Programme

Part 1

Module 1   Introduction; examples of multilevel-data structures; when (and when not) to use
                  multilevel models

Module 2	Random Intercept- und Intercept-as-Outcome models
Module 3	Exercise: How to run Intercept-as-Outcome models for hierarchical Two-level-Data
Module 4	Slope-as-Outcome models
Module 5	Exercise: How to run Slope-as-Outcome Models

1st Live Meeting 10th August: Question & answers, opportunity to discuss individual models

Part 2

Module 6	Multilevel data structures for panel data
Module 7	Exercise: Intercept-and-Slope-as-Outcome models for panel data
Module 8	Contextual effect models
Module 9	Exercise: How to run Contextual effect models

2nd Live Meeting 24th August: Question & answers, opportunity to discuss individual models

Target Group

This course is designed for application-oriented participants who are familiar with the basics of multivariate data analysis (e.g. conducting and interpreting a multivariate regression analysis) and would now like to expand their scope.

Course Language

English (German, if only German participants)
Please note: As this is not an English language course proficiency in English at the C1 level of competency is required.

To gain the ECTS credit points participants have to:

Complete the exercises & report.

About the lecturer

Elmar Schlueter is professor of sociology at JLU Giessen and obtained his PhD as a fellow of the DFG research training school 'group-focused enmity'. His research focuses on cross-national and/or longitudinal analyses, often using multilevel and structural equation modelling for systematic theory testing. See his published research here https://t1p.de/shiny-publications-ElmarSchlueter.

Registration

If you would like to participate in this workshop, please register by **July 31, 2020** via e-mail at info@ggs.uni-giessen.de.