ACADEMIC TOOL – METHODS
Elementary
Advanced
Postdocs

Rhein-Main
Universitäten
hfgOF_MAIN

Introduction to Meta-Analysis

🏁 Objective

Participants will learn the basic concepts behind as well as the steps necessary for conducting a meta-analysis. After the workshop, the participants will be able to plan and conduct a meta-analysis to answer a research question in their field of inquiry.

📖 Description

The workshop will cover the following elementary topics:

- Systematic search of literature
- Development of coding schemes and data extraction
- Calculation of effect sizes
- Fixed-effects meta-analysis
- Random-effects meta-analysis
- Inclusion of discrete and continuous covariates (subgroup analysis, meta-regression)
- Correction for artifacts
- Publication bias
- Multilevel meta-analysis
- Multivariate meta-analysis
- Robust meta-analysis

⚙ Methodology

The workshop will consist of lectures, in which the main concepts will be explained. The participants will work on exercises which focus on the application of the acquired knowledge.
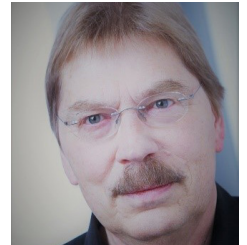
ℹ Conditions

- Participants should have knowledge of elementary descriptive and inferential statistics as taught in basic introductory courses (Statistics I &II).
- We further assume that all participants are familiar with the basics of R and RStudio. If you are not familiar with R or RStudio yet, but wish to attend the workshop, you will need to familiarize yourself with them independently ahead of the workshop. Please contact *workshops@grade.uni-frankfurt.de* after your confirmed registration to receive some introductory material, which you can work through.
- **Software requirements:** Own laptop with an up-to-date version of R and RStudio insstalled. You will receive further information regarding the required downloads with the registration confirmation.

ℹ Organizational Information

Language / Format	English / On campus
Target group	Doctoral Candidates at all stages and Postdocs from the Humanities, Social Sciences and Life Sciences
Date	Tuesday-Thursday, 30 May – 1 June 2023, 9:00 – 17:00
Registration	**For registration click here**

Trainers

Prof. Dr. Heinz Holling
WWU Münster

Senior professor for Statistics and Methods at the University of Münster since 2018.
Previously, he was the head of the chair of Statistics and Methods at the University of Münster.

Research topics
- Meta-analysis
- Optimal design
- Conjoint analysis
- Intelligence

Katrin Jansen
WWU Münster

Research scientist at the University of Münster, and member of Heinz Hollings work unit.
Previously, she studied psychology and mathematics at the University of Münster, and worked as a student assistant and tutor at the Department of Psychology.

Research topics
- Meta-analysis (in particular meta-analysis of rare events)