JUSTUS-LIEBIG-
UNIVERSITÄT
GIESSEN

GGS
Gießener Graduiertenzentrum
Sozial-, Wirtschafts- und Rechtswissenschaften

Workshop

Introduction to Meta-analysis and Effect Size Calculation

Organizational details

Instructor: *Prof. Siegfried L. Sporer, Ph.D.*
Dates: July 10, 15:00-19:00,
                July 19, 14:00-18:00, &
                July 26, 14:00-18:00
Location: Licher Str. 66, room 601 (basement)
ECTS: 3 ECTS

Objectives

The aim of this workshop is to enable participants to calculate effect sizes for experimental and correlational designs and to introduce them to the principles of how to conduct a meta-analysis. Problems of meta-analyses will be discussed to sensitize participants how to read published meta-analyses critically.

Contents

- How to formulate a research question and hypotheses in meta-analysis

- Literature research (with PsychInfo and SSCI)

- Calculation of different effect sizes (d, r, OR) with Excel

- Coding of study characteristics

- Calculating inter-coder reliability (with SPSS)

- Ways of organizing data

- Checking for outliers

- Fixed-effects models

- Random-effects models

- Moderator analyses

- Meta-regression

- Illustration and interpretation of results

- Publication bias

- How to critically analyze other meta-analyses?

To gain the ECTS Credit points you have to:

- Read all reading assignments before class

- Answer questions to the reading assignments in class

- Program different effect size indices as homework

- Design a simple codebook and code study characteristics

- Read, interpret, and criticize published meta-analyses

Target group

Doctoral candidates and postdoctoral researchers at GGS

Prerequisites

Good basis of statistical techniques (ANOVA (t-, F-test), correlation, regression)

Required reading

Lipsey, M. W., & Wilson, D. B. (2001). Practical meta-analysis. Thousand Oaks, CA: Sage Publications.

Course language

English

Registration

Asap via e-mail at info@ggs.uni-giessen.de