

Discipline: Methods

1. Language

English

2. Title

Meta-Analysis

3. Lecturer

Prof. Dr. Martin Eisend

4. Date and Location

September 10 – 13, 2024

Harnack-Haus
Innestr. 16-20
14195 Berlin

5. Course Description

5.1 Abstract and Learning Objectives

Meta-analyses have become very popular in many fields of the social sciences incl. business and management research. The results of meta-analyses attract substantial interest by both scholars and practitioners, as indicated by high citation numbers and widespread dissemination of meta-analytic findings in the media.

By summarizing results drawn from a set of studies concerning a specific topic and by discovering consistencies and explaining inconsistencies in these results, meta-analysis is an essential step in the process of knowledge accumulation, theory building and theory testing in science, linking past research with future scientific endeavors.

The course targets researchers who are interested in understanding, conducting, and publishing meta-analytic research. Participants of this course will learn how to conduct and publish a high-quality meta-analysis in the area of management and business research. To this aim, the course follows a step-by-step procedure that covers the entire meta-analysis research process, including problem formulation and definition of a research question for a meta-analysis, literature search, study and effects coding, data preparation and analysis with different software tools, and reporting and publishing. Participants will further learn how to evaluate meta-analyses in the business and management literature and to follow the respective methodological discussion about meta-analyses in their field.

5.2 Content

The course covers the following topics:

- Fundamentals of meta-analysis
- Defining a research question for a meta-analysis
- Literature search and study selection
- Coding and evaluating studies and research findings
- Data preparation
 - o Types of effect sizes
 - o Computation of effect sizes and corresponding variance
 - o Transformations of effect sizes
 - o Artefact corrections
- Data analysis
 - o Effect size integration, weighting, random- and fixed-effects
 - o Homogeneity tests
 - o Explaining the variability of effect sizes (moderator analysis)
 - o Meta-regression
 - o Publication bias
 - o Meta-analytic structural equation modelling
 - o Software programs
- Presenting and publishing meta-analyses

5.3 Schedule (including start and end time)

Each day of the four-day workshop has two sessions from 09.00 to 12.00 and from 13.00 to 16.00, with a short break in both sessions. Lunch break is from 12.00 to 13.00 each day.

5.4 Course format

The course consists of presentations by the lecturer and discussions with the participants, interspersed by computer exercises and assignments.

6. Preparation and Literature

6.1 Prerequisites

Knowledge of basic statistical methods and multivariate data analysis, in particular, regression analysis is essential.

6.2 Essential Reading Material

See 6.4

6.3 Additional Reading Material

The following papers are recommended as introductory texts:

Grewal, D., Puccinelli, N., & Monroe, K. B. (2018). Meta-analysis: Integrating accumulated knowledge. *Journal of the Academy of Marketing Science*, 46(1), 9-30.

Steel, Piers, Sjoerd Beugelsdijk, and Herman Aguinis (2021). The anatomy of an award-winning meta-analysis: Recommendations for authors, reviewers, and readers of meta-analytic reviews. *Journal of International Business Studies*, 52: 23-44.

There are many introductory textbooks on meta-analysis, but the following ones are recommended for beginners:

Lipsey, Mark W. and David T. Wilson (2001), *Practical Meta-Analysis*, Thousand Oaks, CA: Sage. (a bit older and some analytical parts are outdated, but the basics are described in an easy-to-read way).

Borenstein, Michael, Larry V. Hedges, Julian P. T. Higgins, and Hannah Rothstein (2021), *Introduction to Meta-Analysis*, 2nd Ed., Hoboken, NJ: Wiley. (comprehensive introduction)

A series of papers on meta-analysis will be discussed and provided before or during the course.

6.4 To prepare

Participants should bring a computer with Excel and SPSS installed. IBM offers a 30-days trial version of SPSS (www.ibm.com/products/spss-statistics). We will use SPSS for the coding procedures.

During the course, further statistics software packages will be introduced and used (including R, Stata, AMOS, HLM) and participants can decide which one they prefer to work with. Hence, it is not necessary to install all of them, but the program they are used to work with.

In preparation for the course, participants should further select and read three articles presenting a meta-analysis in their field of research.

7. Administration

7.1 Max. number of participants

20

7.2 Assignments

Several assignments on the various steps of the meta-analysis process.

7.3 Exam

Attendance, active participation, and successful presentation at the end of the course.

7.4 Credits

The course corresponds to a scope of 6 LP/ECTS.

8. Workload

Working Hours	
Preparations (software, meta-analysis papers)	80
Active participation	50
Preparation for exam/presentation	50
TOTAL	180 h