

Ph.D. in “Life Course Research” – Trans-curricular courses

Academic Year 2023-2024

Meta-analysis

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Objectives

The course focuses on the synthesis of literature and on the statistical methods to combine and compare published results, investigating their heterogeneity. After a brief introduction to systematic review and meta-analyses, I will illustrate fixed effects and random effects meta-analysis models within both a frequentist and a Bayesian framework. Then, the discussion will be extended to meta-regression, multivariate meta-analysis techniques and network meta-analysis. The course will consist of theoretical and practical sessions.

Program

Monday 18 March, 14.00-17.00:

- Introduction to systematic reviews
- Fixed effects and random effects meta-analysis

Tuesday 19 March, 10.30-13.30:

- Investigating heterogeneity through meta-regression

Wednesday 20 March, 14.00-17.00:

- Capturing all sources of uncertainty: the Bayesian approach

Thursday 21 March, 10.30-13.30:

- Basics of multivariate meta-analysis and network meta-analysis

Suggested lectures

To be defined

Requirements

Basic concepts of inference