

Behavioral Genetic Data Analysis — Basic Workshop

A workshop on the core concepts and statistical methods of behavioral genetics



In this workshop, participants will be introduced to the basic concepts and models of behavioral genetics. Using the data of the TwinLife study, participants will learn how to analyze twin family data in R and to interpret the results.



Target group

Social scientists from a broad disciplinary range (sociology, psychology, economics, political science) interested in including behavioral genetic models to their methodological toolbox. Basic knowledge of R is mandatory, basic knowledge of structural equation modelling is recommended.

Workshop Program

The first half of the workshop provides a general introduction to the field of behavioral genetics. Moreover, participants will get a quick overview of the TwinLife study as well as its study design and data structure. In the second half of the workshop, a practical introduction to the methods and statistical models of behavioral genetics will be provided. Participants will learn how to build basic behavioral genetic models, like the univariate and bivariate ACE model using the TwinLife data, as an exemplary dataset. Finally, it will be explained how to interpret results of behavioral genetic analyses.

TwinLife Study

The German TwinLife study uses a longitudinal twin-family design to collect data from about 4000 families. It covers a vast number of multidisciplinary topics as well as measures of cognitive ability and personality in order to discover how inter-individual differences and social inequality arise. The data of the study is available to the research community and will be used for the practical session in this workshop.

If you have any questions, please feel free to contact us at the following email address: workshop@twin-life.de





UNIVERSITÄT DES SAARLANDES



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Behavioral Genetic Data Analysis — Advanced workshop

A workshop on more advanced concepts and statistical methods of behavioral genetics



In this workshop, participants will be introduced to more advanced concepts and models of behavioral genetics. Using the data of the TwinLife study, participants will learn how to analyze twin family data with more complex models in R and to interpret the results.



Target group

Social scientists from a broad disciplinary range (sociology, psychology, economics, political science) interested in including behavioral genetic models to their methodological toolbox. Basic knowledge of R and of behavioral genetic data analysis (e.g., computing univariate/ bivariate ACE models) is mandatory. A prior participation in the basic workshop is highly recommended.

Workshop Program

At the beginning of the workshop, a short recapitulation of the basics of behavioral genetics will be provided. The first day of the workshop will cover the conceptual background for ACE-beta models and their implementation and interpretation in R. The second day will focus on Gene-by-Environment Interactions (GxE). After getting an understanding of the concepts behind GxE models, statistical models will be implemented in R.

TwinLife Study

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