





Misurazione e Ricerca in Psicologia Applicata Università degli Studi di Verona

In-presence international summer school

MULTILEVEL MODELING: APPLICATIONS TO CROSS-SECTIONAL AND LONGITUDINAL DESIGNS

June 6-10, 2022

Department of Psychology and Cognitive Science, University of Trento

Corso Bettini, 84 Rovereto (TN)

Scope and goals

Researchers often are interested in estimating relationships between variables that reside at different levels of analysis (e.g., day, individual, group, organization). For instance, is a work group's support climate related to individual performance? Does the relationship between daily stress and wellbeing depend on individual extroversion? To estimate these relationships between variables that span across different levels of analysis, researchers must use Multilevel Modeling Methods.

The goal of this course is to learn how to use Multilevel Modeling Methods to analyze nested data in cross-sectional and longitudinal designs. Participants will be able to understand the logic underlying multilevel analysis, build multilevel models, analyze multilevel data in cross-sectional and longitudinal designs, and interpret the results obtained appropriately.

Regarding teaching methods, the course will combine instructor presentations, guided practical exercises, and autonomous practical exercises.

The course is open to national and international PhD students and Faculty members who want to improve their analytic skills in the area of Multilevel Modeling Methods.

Contents:

The course will cover the following contents:

- 1. Introduction: The Logic Underlying Multilevel (ML) Modeling Methods
- 2. The consequences of disregarding the nested structure of data
- 3. Types of effects and parameters
- 4. Basic Multilevel Models in cross-sectional designs
- 5. Estimation using SPSS and Mplus
- 6. Extending the logic of Multilevel Modeling to longitudinal designs
- 7. Multilevel models to investigate within-subject change by using growth models
- 8. Estimation using SPSS and Mplus
- 9. Multilevel models to predict within-subject change
- 10. Estimation using SPSS and Mplus

Schedule:

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
MORNING	Traveling	Basic Multilevel	9am-11am	Multilevel	Multilevel
9.00am-1.00pm	_	Models in cross-	Extendingthe	modelsto	models to predict
_		sectional designs	logic of	investigate	within-subject
			Multilevel	within-subject	change
			Modelingto	change by using	-
			longitudinal	growth models	Estimationusing
			designs		SPSS and Mplus
			_		
					Closing &
			Hike in the		farewell
AFTERNOON	Introduction:	Estimationusing	Dolomites*	Estimationusing	Traveling
2.30pm-5.00pm	sections 1, 2, &	SPSS and Mplus		SPSS and Mplus	
	3				

* Depending on the whether the day of the activity may change. It is intended as an easy hike that is affordable for everyone.

International Lecturer: Prof. Vicente González-Romá, Idocal, University of Valencia, Spain

Software requirements:

Participants must bring their laptop with SPSS and the demo version of Mplus* installed (*downloadable at: https://www.statmodel.com/).

Fees:

Senior AIP members: euro 350 Junior AIP members: euro 250 Not AIP members: euro 400

Application:

The applications will be selected on specific requirements, taking into account the overall number of participants. **DEADLINE: 12th of MAY 2022**.

To apply fill in the form at this link: <u>https://forms.gle/QytYcanaNLFQqEvJ8</u>.

Selection criteria for applications

Participants' selection by the scientific committee will be based on three criteria:

- a) **Career**. Priority to younger researchers (PhD students, research fellows and post doc, temporary assistant professors, researcher with tenure).
- b) Research area. Priority to researchers who work on organizational psychology topics.
- c) **Researchers university**. The selection will try to facilitate the participation of the greater number of universities (Doctoral schools and Departments).

Scientific Committee

Margherita Brondino, University of Verona Margherita Pasini, University of Verona Monica Molino, University of Turin

Organizer Committee

Lorenzo Avanzi, University of Trento Margherita Brondino, University of Verona Guendalina Graffigna, Catholic University of the Sacred Hearth of Milan Dina Guglielmi, University of Bologna Amelia Manuti, University of Bari Monica Molino, University of Turin