

SPR - Italy Area Group Sezione italiana della SOCIETY FOR PSYCHOTHERAPY RESEARCH

LONGITUDINAL DATA ANALYSIS IN PSYCHOTHERAPY RESEARCH Workshop with Giorgio Tasca Milan, 17th May 2019 9.30-17.30

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The goal of this workshop is to introduce to the participant to basic, intermediate, and advanced concepts related to hierarchical linear modeling.

Hierarchical linear models (i.e., mixed or multi-level regression models) represent an important evolution in the analysis of hierarchically structured data and change/development data. Data in psychotherapy research studies can be hierarchically structured (i.e., patients nested within groups; patients nested within therapists; or patients and therapists nested within sites). Nested data may violate the assumption of independence of observations in parametric tests; and this violation results in drastically increased Type I error rates. In addition, psychotherapy researchers are often interested in change or development over time (e.g., pre to post to follow up; or the development of process variables across multiple sessions). Traditional methods of assessing change and development are often unsatisfactory because of violations of statistical assumptions and because traditional methods do not model individual change. Modern longitudinal data analytic methods, including hierarchical linear models, provide an opportunity to model dynamic fluctuations in individual data across time.

> SPR-Italia Via Liguria 19, Palermo CF: 11661830155 P.IVA: 06491871007



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Learning Objectives:

The learner will be able to:

- 1) To learn the fundamentals of mixed model regressions and when to apply these techniques in psychotherapy research.
- 2) To understand problems related to nested data and possible ways of correcting for these issues.
- 3) To understand problems with traditional methods of longitudinal data analysis and how mixed model regressions address some of these shortcomings.
- 4) To be able to consider new research questions based on mixed model regression techniques.

PROGRAM

9.30-13.00

Part 1: Hierarchically Nested Data

- Review issues related to hierarchically nested data Impact on increased Type I error rates.
- How to assess for dependence.
- Introduce multilevel modeling to address dependence in one's data.

Part 2: Longitudinal Data Analysis

- Review traditional methods of longitudinal data analysis and associated problems.
- Work through a psychotherapy research example
- Introduce longitudinal data analysis with multilevel modeling
- Discuss its advantages over traditional techniques.

13.00-14.30 - Lunch break

14.30-16.30

Part 3: Detailed Case Example

- Set up data files in SPSS
- Conduct analyses in HLM

16.30-17.30 Discussion C. Maffei, F. Del Corno, A. Fossati, A. Compare, G. Lo Coco

Venue: San Raffaele Turro Aula Santa Chiara, Palazzina D Via Stamira D'Ancona, 2 - 20127 Milano

Registration Free event while seats last. For registration, send an email to the organizing secretary: info@arkeventi.it

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