

Symposium on Recent Advances in Methods for the Analysis of Panel Data

15-16 June 2011

ISCTE-IUL, Lisbon University Institute, Portugal

Title

Latent variable models for longitudinal ordinal variables

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Abstract

Longitudinal data are collected for mainly studying changes across time. Statistical models that study the evolution in time of traits, attitudes, or latent constructs in general are known as dynamic factor analysis model. Fitting a factor model to longitudinal data one needs to account for the interrelationships of the observed variables or indicators within each time point as well as the interrelationships of the same indicator across time. In this talk we will discuss various model specifications for analyzing longitudinal ordinal data. Emphasis will be given to estimation methods and goodness-of-fit tests. Real and simulated examples will be used to illustrate the proposed methodology.