

Workshop on Growth Curve Analysis

Organised by Anne Christine Holtmann and Fabrizio Bernardi

Lecturer: Juho Härkönen, Associate Professor of Sociology at Stockholm University

2 – 3 June 2014

Credits: 10

Seminar Room, Villa Sanfelice

9:00 – 13:00

14:00 – 15:30

Please register with: Monika.Rzemieniecka@EUI.eu

Understanding change through the life courses of individuals (or, say, organizations) is a prominent task in much social science. How much change is there, is it for the better or for the worse, and what explains these trajectories? Growth curve analysis has entered social scientists' tool kits as a method for analyzing change in continuous outcomes such as incomes, occupational status, and different test scores. These models enable description and multivariate analyses of the factors determining the level at which individuals are at the beginning of the follow-up period, and those which affect the subsequent trajectories of change.

This two-day workshop provides an introduction to growth curve analysis in a multilevel framework using Stata. Course requirements include getting familiar with the assigned readings, class participation during the whole workshop, and a small independent study, preferably with own data. By the end of the course, the students should know the relevant terminology, understand the linkages of growth curve modeling to life course research in general and to other longitudinal methods (such as panel regression, sequence analysis, and event history analysis), and to apply the methods in their own research with correct interpretation of the results.

Core readings

Curran, Patrick J., Obeidat, Khawla & Losardo, Diane. 2010. Twelve frequently asked questions about growth curve modeling. *Journal of Cognition and Development* 11(2): 121-136.

Halaby, Charles N. 2003. Panel models for the analysis of change and growth in life course studies. Ch 23 in Mortimer, J.T. & Shanahan, M.J. (eds.) *Handbook of the Life Course*. Springer.

Rabe-Hesketh, Sophia & Skrondal, Anders. 2012. *Multilevel and Longitudinal Modeling Using Stata. Volume I: Continuous Responses*. Stata Press. Chapter 7.

Steele, Fiona. 2008. Multilevel models for longitudinal data. *Journal of the Royal Statistical Society A* 171(1): 5-19.

Applications

Cherlin, Andrew J., Chase-Lansdale, P. Lindsay & McRae, Christine. 1998. Effects of parental divorce on mental health throughout the life course. *American Sociological Review* 63(2): 239-249.

Härkönen, Juho and Erik Bihagen. 2011. Occupational attainment and career progression in Sweden. *European Societies* 13(3):451-79.

Magnuson, Katherine & Berger, Lawrence M. 2009. Family Structure States and Transitions: Associations With Children's Well-Being During Middle Childhood. *Journal of Marriage and Family* 71(3): 575-591.

Manzoni, Anna, Juho Härkönen and Karl Ulrich Mayer. Moving on? A growth-curve analysis of occupational attainment and career progression patterns in West Germany. *Social Forces*, forthcoming.

Requirements

- Participation
- Assigned Readings
- Essay applying growth curve modelling on own data.