Ph.D. in "Life Course Research" – Socio-demographic curriculum

Academic Year 2023-2024

Introduction to the empirical analysis of socio-demographic phenomena (consolidation)

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Objectives
The course aims to consolidate students' knowledge of how to formulate research questions and test them empirically through applications of the generalized linear model. Methods are presented and discussed through a worked example to give students the basic tools to apply quantitative methods to answer socio-demographic research questions. Students will be introduced to using the Stata software for implementing empirical analyses with the techniques discussed in the lectures.

Program
Monday morning (Instructor: R. Guetto):
– Brief introduction to theory-driven empirical research: formulating a research hypothesis.
– Definition of the analytical sample, operationalization, and description of variables.
Monday afternoon (Instructor: R. Guetto):
– Bivariate associations (cross-tabs, odds-ratios, chi-square test, correlation and simple linear regression).

Tuesday morning (Instructor: R. Guetto):
– The logic of multivariate analysis, multiple linear regression.

Wednesday morning (Instructor: R. Guetto):
– Factor analysis, reliability, and validity of a scale.

Thursday morning (Instructor: M. Cozzani):
– Logistic regression.

Suggested lecture
Agresti, A. and Finlay, B. (2017) *Statistical Methods for the Social Sciences, fifth edition*, Pearson.

Requirements
Levels of measurement of variables, descriptive statistics, cross-tabulations, correlation and simple linear regression. Some acquaintance with multiple linear regression and with the Stata software is helpful.