
The workshop is hosted by the newly established Inequality and Social Policy Unit at the WZB, led by Professor David Brady.

All are invited to attend any and/or all sessions
Please reply by Monday December 3, 2012 to
buero.brady-usp@wzb.eu
phone: +49 30/25491-301 / -371
(registration is limited)

Venue:
Social Science Research Center Berlin
Reichpietschufer 50
10785 Berlin-Tiergarten
Room A 310

Dr. **Andrew Fullerton** is Associate Professor and Director of Graduate Studies in Sociology at Oklahoma State University. He earned his PhD in sociology in 2007 at the University of Connecticut, and also holds Masters degrees in sociology and in survey research. Professor Fullerton is presently studying cross-national differences in job security, racial inequality in health, unionization, and voting.

He has published more than two dozen peer reviewed articles, including pieces in *Social Forces*, *European Sociological Review*, *Social Problems*, and *Sociological Methods and Research*. Professor Fullerton teaches a variety of classes in quantitative methods. He is also in the process of writing a book on regression for ordinal outcomes and has published multiple articles on statistical methods.

Wissenschaftszentrum Berlin
für Sozialforschung
Social Science Research Center
Berlin
Reichpietschufer 50
10785 Berlin
Telefon +49 (30) 25491-0
Telefax +49 (30) 25491-684
wzb@wzb.eu

WZB

Wissenschaftszentrum Berlin
für Sozialforschung

Multi-Level Analysis

taught by Professor Andrew S. Fullerton

Workshop

December 12-14, 2012

Multi-Level Analysis

taught by Professor Andrew S. Fullerton

Social scientists often examine relationships between variables measured at multiple levels of analysis. For example, a labor market scholar may be interested in simultaneously investigating the effects of individual human capital and structural characteristics of local labor markets on workers' wages, promotion opportunities, and job insecurity. There are two levels of analysis in this example: the individual level (level 1) and the local labor market level (level 2). Single-level methods such as OLS, logit, and probit are inappropriate for models with variables measured at multiple levels of analysis because they ignore the clustering of observations at the lowest level within one or more higher levels (e.g., individuals within local labor markets).

This workshop provides an introduction to multilevel models, which take into account the clustering of observations and enable researchers to examine relationships between variables at multiple levels of analysis. We will begin with the basic two-level random intercept model and then move on to other models, including the two-level random coefficient model, three-level models, cross-classified models, and multilevel models for categorical outcomes. The workshop will also cover topics such as centering, model fit, and hypothesis testing in multilevel models.

Finally, we will consider several empirical examples and discuss practical issues such as model estimation in Stata. The only pre-requisite is a basic course in multiple regression.

Schedule

Wednesday, December 12, 2012

10 a.m.-12.10 p. m.

Basic Two-Level Random Intercept Model

1.30 p.m-3.40 p.m

Basic Two-Level Random Coefficient Model

Thursday, December 13, 2012

10 a.m-12.10 p.m

Growth Models for Longitudinal Data

1.30 pm-3.40 p.m

Three-Level and Cross-Classified Models

Friday, December 14, 2012

10 a.m.-12.10 p.m

Multilevel Models for Binary Outcomes

1.30-3.40 p.m.

Multilevel Models for Ordinal and Nominal Outcomes

Suggested Readings

Goldstein, Harvey. 2011

Multilevel Statistical Models, 4th Edition. New York, NY: Wiley. (Note: The 2nd edition is available for free on Goldstein's website: www.cmm.bristol.ac.uk/team/HG_Personal/multbook1995.pdf)

Hox, Joop J. 2010

Multilevel Analysis: Techniques and Applications, 2nd Edition. New York, NY: Routledge

Rabe-Hesketh, Sophia, Anders Skrondal. 2012

Multilevel and Longitudinal Modeling Using Stata, 3rd Edition. College Station, TX: Stata Press

Raudenbush, Stephen W., Anthony S. Bryk. 2002

Hierarchical Linear Models: Applications and Data Analysis Methods, 2nd Edition. Thousand Oaks, CA: Sage
