

Structural Equation Modelling with MPLUS

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Course Outline

Introduction: Preliminaries, Terminology, the Language of SEM

Readings: Hayduk, Leslie A. 1987. Structural Equation Modelling with LISREL. Baltimore: Johns Hopkins University Press. Chapters 1-4.

Byrne, Barbra. 1998. Structural Equation Modelling with LISREL, PRELIS, and SIMPLIS: Basic Concepts, Applications, and Programming. New Jersey: Lawrence Erlbaum . Chapters 1-2.

Part 1: Basic Path Models and Exploratory Factor Analysis, The MPlus Package

Readings: Muthén Linda and Muthén Begnt. 2010. MPlus: Statistical Analysis with Latent Variables: Users Guide <WWW Document: <http://www.statmodel.com/download/usersguide/Mplus%20Users%20Guide%20v6.pdf>> Chapters 1-5.

Byrne, Barbara. 2011. Structural Equation Modelling with MPlus: Basic Concepts, Applications, and Programming. New York: Routledge Academic. Chapters 1-2.

Examples: Cingranelli, David L. 1981. "Race, Politics, and Elites: Testing Alternative Models of Municipal Service Distribution." *American Journal of Political Science*. 25: 664-692.

Part 2: Confirmatory Factor Analysis and Basic Path Regression with Latent Factors

Readings: Muthén Linda and Muthén Begnt. 2010. MPlus: Statistical Analysis with Latent Variables: Users Guide <WWW Document: <http://www.statmodel.com/download/usersguide/Mplus%20Users%20Guide%20v6.pdf>> Chapters 1-3, 5 (selections).

Byrne, Barbara. 2011. Structural Equation Modelling with MPlus: Basic Concepts, Applications, and Programming. New York: Routledge Academic. Chapters 3-6.

Examples: Reifler, Jason, Thomas J. Scotto, and Harold D. Clarke. 2011. "Foreign Policy Beliefs in Contemporary Britain: Structure and Relevance." *International Studies Quarterly* 55: 245-266.

Goldberg, Abraham, Kevin M. Leyden, and Thomas J. Scotto. Forthcoming. "Untangling What Makes Cities Liveable: Happiness in Five Cities" *Urban Design and Planning*.

Part 3: Multiple Group Analysis

Readings: Muthén Linda and Muthén Begnt. 2010. MPlus: Statistical Analysis with Latent Variables: Users Guide <WWW Document: <http://www.statmodel.com/download/usersguide/Mplus%20Users%20Guide%20v6.pdf>> Chapter 5 (selections).

Byrne, Barbara. 2011. Structural Equation Modelling with MPlus: Basic Concepts, Applications, and Programming. New York: Routledge Academic. Chapters 7-9.

Examples: Clarke, Harold D., Allan Kornberg, and Thomas J. Scotto. 2010. "Accentuating the negative? A political efficacy question wording experiment." *Methodology: European Journal of Research Methods in the Behavioral and Social Sciences* 6: 107-117.

Medina, T.R., S.N. Smith, and J.S. Long. 2009. "Measurement Models Matter: Implicit Assumptions and Cross-National Research." *International Journal of Public Opinion*, 21: 331-361.

Part 4: Advanced Topics and Student Requests

Readings: Muthén Linda and Muthén Begnt. 2010. MPlus: Statistical Analysis with Latent Variables: Users Guide <WWW Document: <http://www.statmodel.com/download/usersguide/Mplus%20Users%20Guide%20v6.pdf>> Chapters 6-10 (selections).

Byrne, Barbara. 2011. Structural Equation Modelling with MPlus: Basic Concepts, Applications, and Programming. New York: Routledge Academic. Chapters 10-12.

Examples: Scotto, Thomas J., Harold D. Clarke, Allan Kornberg, Jason Reifler, David Sanders, Marianne Stewart, and Paul Whiteley. 2010. "The dynamic political economy of support for Barack Obama during the 2008 presidential election campaign." *Electoral Studies* 29: 545-556. (Growth Modelling)

Annaheim, Beatrice, Thomas J. Scotto, and Gerhard Gmel. 2010. "Revising the cannabis use disorders identification test (CUDIT) by means of Item Response Theory." *International Journal of Methods in Psychiatric Research* 19: 142-155. (IRT)

Buczholz, Kathleen, et al. 1996. "Can We Subtype Alcoholism? A Latent Class Analysis of Data from Relatives of Alcoholics in a Multicenter Family Study of Alcoholism." *Alcoholism: Clinical and Experimental Research* 20: 1462-1471. (Latent Class Analysis)