

Structural equation modeling and Bayesian Analysis Using Stata

Chuck Huber, PhD
Senior Statistician, StataCorp LP
Adjunct Associate Professor of Biostatistics,
Texas A&M School of Public Health



Structural Equation Modeling using Stata

In this talk I introduce the concepts and jargon of structural equation modeling (SEM) including path diagrams, latent variables, endogenous and exogenous variables, and goodness of fit. I describe the similarities and differences between Stata's `-sem-` and `-gsem-` commands. Then I demonstrate how to fit many familiar models such as linear regression, multivariate regression, logistic regression, confirmatory factor analysis, and multilevel models using `-sem-` and `-gsem-`. I wrap up by demonstrating how to fit structural equation models that contain both structural and measurement components.

Bayesian models using Stata

Bayesian analysis has become a popular tool for many statistical applications. Yet many data analysts have little training in the theory of Bayesian analysis and software used to fit Bayesian models. This talk will provide an intuitive introduction to the concepts of Bayesian analysis and demonstrate how to fit Bayesian models using Stata. No prior knowledge of Bayesian analysis is necessary and specific topics will include the relationship between likelihood functions, prior, and posterior distributions, Markov Chain Monte Carlo (MCMC) using the Metropolis-Hastings algorithm, and how to use Stata's Bayes prefix to fit Bayesian models.

August 29, 2017

10-12pm Structural Equation
Modeling using Stata

12-1pm Bayesian models
using Stata

MH-1401

We would appreciate RSVPs so we can
ensure the appropriate room capacity

[RSVP:](http://bit.ly/2vCPe7N) <http://bit.ly/2vCPe7N>