

variables. Recent software developments have made it possible for normal humans to gain a good intuitive understanding of the methods and to use them successfully without mastering the enormously complex equation specification and estimation procedures that underlie SEM. That is what we will do. The software we will use is AMOS (Analysis of MOment Structures), which is licensed to and runs as a module in SPSS.

Organization of the Course

It won't really be organized. Doing SEM is an art, not a science. We will simply do lots of it, together, and I will tell you what I'm thinking as we do it. If it seems useful or appropriate, I will assign homework. If it doesn't, I won't. As always, homework is handled as "do it until you get it right." One year, a student suggested that a large-scale class project might be a valuable learning tool. Another year, the class worked on several senior thesis projects being done by class members. Once you have established a base of skills, we will decide whether one of those or some other direction seems most likely to be of value to you.

Expectations

To be comfortable with SEM, you should have a strong background in multiple (least-squares) regression. Some familiarity with exploratory factor analysis is helpful but not essential.

I expect that you will be here for every class. This is an apprenticeship in which you learn a skill by working with someone who is (for the moment) better than you are and with people who are just as puzzled as you are. You cannot gain this skill by reading a text or class notes or by asking someone (even me) to summarize what was covered. If you cannot be in class, let me know in advance and explain why.

Tentative Topics

- Statistical Basics and Overview of SEM.
- Path Analysis (beginning with a review of multiple regression): *Tests hypotheses about cause-and-effect connections among measured variables.*
- Confirmatory Factor Analysis (beginning with a review of exploratory factor analysis): *Tests hypotheses about the existence of latent variables that can be inferred from observed, measured variables.*
- Hybrid (or Structural) Models: *Tests hypotheses about cause-and-effect connections among both measured and latent variables.*
- Multiple-group SEM: *Tests whether the same latent structure can be found in different groups.*
- Advanced Topics
 - Nonrecursive Models.
 - Latent Mean Structures & Latent Growth/Change Models.