Structural Equation Modeling with R using lavaan

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Over the last three decades structural equation modeling (SEM) has become a popular data analysis tool for social and personality psychology researchers. R offers full featured, easy to use options for SEM that rival or exceed commercial packages. In this talk I will focus on the lavaan package (Roseel, 2012) for SEM. lavaan provides powerful modeling tools with easy to understand syntax and is rapidly growing in popularity as a software option for SEM. I will provide examples of simple and complex SEMs using lavaan, including multiple group models and models with categorical indicators. In addition, I will highlight a number of add-on packages that extend the capabilities of lavaan including missing data handling, path diagram generation, a graphical user interface, and power analysis.