Advanced topics in Structural Equation Modeling

Location: CIQSS, 3535 Queen-Mary, Suite 420, Montréal
Dates: May 8 to 10, 2013

Course objectives and content

This intensive, graduate-level, three-day seminar deals with advanced topics in structural equation modeling (SEM). It assumes that participants have a working knowledge of basic SEM applications, including path analysis, confirmatory factor analysis (CFA), and the evaluation of structural-regression (full "LISREL" models) in single samples. Topics for this advanced workshop include power analysis, the simultaneous evaluation of a model across multiple samples, the analysis of models with mean structures, latent growth models, and estimation of curvilinear or interactive effects of observed or latent variables. The presentation of topics will be conceptually rather than mathematically oriented despite the advanced level of the course, and many research examples will be considered. Computer output for all research examples generated by LISREL, Mplus, or EQS are available on the seminar Web site.

Trainer

This training session will be under the responsibility of Dr. Rex B. Kline, Professor, Department of Psychology, Concordia University.[1]

General course information

The sessions are in English. Because participants are assumed to have basic experience with SEM, there will be no computer practice portion in the workshop.

Schedule

The seminar is scheduled from **9:00am to 5:00pm**.

Seminar web site

http://psychology.concordia.ca/fac/kline/sem/qicss2.html (available end of April)

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[1] 514-848-2424, ext.7556; rex.kline@concordia.ca; http://tinyurl.com/rexkline

Main source (optional)

Kline, R. B. (2010). *Principles and practice of structural equation modeling* (3rd ed.). New York: Guildford Press. (Resource site at http://www.guilford.com/kline)

Other readings (see seminar web site)

Aguinis, H., & Gottfredson, R. K. (2010). Best-practice recommendations for estimating interaction effects using moderated multiple regression. *Journal of Organizational Behavior*, *31*, 776–786. doi: 10.1002/job.686

Duncan, T. E., & Duncan, S. C. (2004). An introduction to latent growth curve modeling. *Behavior Therapy*, *35*, 333–363. doi:10.1016/S0005-7894(04)80042-X

Hancock, G. R., & Freeman, M. J. (2001). Power and sample size for the Root Mean square Error of Approximation of not close fit in structural equation modeling. *Educational and Psychological Measurement*, *61*, 741–758. doi: 10.1177/00131640121971491

Schmitt, N., & Kuljanin, G. (2008). Measurement invariance: Review of practice and limitations. *Human Resource Management Review*, *18*, 210–222. doi:10.1016/j.hrmr.2008.03.003

Topics and reading schedule

Day 1: Power analysis, multiple-samples analysis, measurement invariance in CFA

Day 2: Estimation of means in SEM, latent growth models

Day 3: Curvilinear and interactive effects of observed and latent variables