Parallel Short Course 7

USING MULTI-GROUP STRUCTURAL EQUATION MODELING AND ADVANCED MEDIATION ANALYSIS IN MEDICAL DECISION MAKING RESEARCH

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Course Level: Intermediate

Format Requirements:
The format will involve didactic lecture and group exercises/discussions. A general understanding of multivariate statistics and experimental design is recommended for participants taking this course. The intended audience includes researchers and practitioners.

Description:
This introductory course provides participants with training in two highly useful approaches to analyzing data from RCT's. The first approach, multi-group SEM analysis, is useful for researchers who wish to test for differences across groups within a model that includes antecedents and mediators leading to one or more outcomes. The second approach, advanced mediation analysis, builds on classic methods of mediation analysis to discover relationships within SEM and other analytical techniques that might not otherwise emerge. Both methods will be taught with the user-friendly SEM software package, AMOS but can be applied within EQS, M-Plus, LISREL, and other modeling software. References and informative step-by-step hand-outs will be provided. The first instructor has extensive experience with multi-group SEM methods in both experimental and cross-sectional research. In 2013, the second instructor received the "Best Paper of the Year" award from the Journal of Consumer Research, the top journal in the field, in part, because of widespread adoption and citation of the advanced mediation approach outlined therein. Objectives: By the end of the course, participants will: Appreciate the value of including multi-group SEM within a larger set of analytical tools available to MDM researchers. Gain additional insight into mediation analysis based on the latest theoretical advances in the field. Understand how to use SEM test for moderating factors such as culture or gender in a system of antecedents, mediators and outcomes. Know how to apply the latest advances in mediation analysis in SEM and in more traditional analytical approaches that use ANOVA and/or regression. Gain confidence in using both techniques to test theoretically grounded hypotheses and uncover relationships that might not be apparent using other methods.