Society for Longitudinal and Lifecourse Studies (SLLS)

Pre-Conference Workshop No.2

Date: Saturday 22nd October 2022
Venue: Case Western Reserve University, USA
Duration: Full Day (09:00 – 17:00 (EDT) with refreshment breaks and lunch)
Fee: £70
Book Here: https://www.slls.org.uk/events/2022-slls-pre-conference-workshops

An Introduction to Structural Equation Modeling for Longitudinal and Life Course Research
Presenters: Kristen Berg, Douglas Gunzler, Adam Perzynski, MetroHealth Medical Center, Case Western Reserve University; Adam Carle, Cincinnati Children's Hospital Medical Center

This workshop will make structural equation modeling (SEM) accessible to a wide audience of interdisciplinary researchers. SEM is a general and powerful multivariate technique to link conceptual models, path diagrams, factor analysis and other mathematical models that are useful when considering longitudinal and life course phenomena.

These techniques allow for 1) combination of continuous, categorical and latent and observed variables; 2) modeling of longitudinal causal relationships including multiple direct and indirect effects simultaneously (mediation analysis); 3) techniques for model selection and comparison; 4) longitudinal measurement models; and 5) modeling and interpreting repeated measurement of individuals over time. These advantages are particularly applicable to both theoretical and applied research problems in longitudinal research.

Participants will experience lecture and discussion. No prior knowledge of SEM is required. A general understanding of regression analysis and experimental design is recommended. The intended audience includes researchers and practitioners interested in understanding latent variables and using cutting-edge analytical approaches to test hypothesized relationships between predictors and outcomes longitudinally. We introduce basic SEM principles, common nomenclature, diagrams, a tiny bit of algebra, and how to conduct longitudinal SEM analyses with relevant illustrative examples for life course researchers. We introduce workshop participants to some widely used longitudinal SEM and related research techniques such as factor analysis, mediation/moderation analysis, measurement models, latent growth curve modeling, and mixture modeling. Whether you want to know how to critique a SEM article or use SEM in your research, sign up! We love to visit and share our expertise. In addition to our numerous peer-reviewed collective contributions to SEM literature, Drs. Gunzler, Perzynski, and Carle recently published *Structural Equation Modeling for Health and Medicine*, a book written specifically for multidisciplinary researchers who seek to understand and apply SEM.