

2022 Robert Wherry Lecture

Presented by the Quantitative Psychology Area & Department of Statistics

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“What longitudinal model should I choose?”

Thursday, March 31st, 2022 @ 3:00 - 4:00pm

209 W 18th Ave. Room EA 170

Zoom Link: <https://osu.zoom.us/j/94866740780?pwd=eFp2TzA0cXBzRkhHb2F5Tlo2UVdudz09>

With the growing availability of longitudinal data comes the question of what model to use? In an ideal world, theory and substantive arguments would be sufficiently clear to dictate one. But in practice, there is little guidance and academic fads or the practice in researchers' fields typically affect model choice. We illustrate how a general longitudinal model (LV-ALT) can help researchers in their selection. The LV-ALT model can specialize to other popular models such as the classic random or fixed effects, growth curve models, autoregressive, latent difference scores, and a variety of other hybrid structures. The LV-ALT model can help to defend the choice of one of these traditional models or it can suggest new hybrid models to consider. We illustrate our results with NLYS79 and Add Health data on self-reported health and an analysis from a paper recently published in *Demography*.

Ken Bollen is the Henry Rudolph Immerwahr Distinguished Professor in the Department of Psychology and Neuroscience and Department of Sociology at UNC at Chapel Hill. He is a faculty member in the Quantitative Psychology Program in the Thurstone Psychometric Laboratory. He also is part of the Methods Unit and a Fellow of the Carolina Population Center. Since 1980 he has been an instructor in the ICPSR Summer Program in Quantitative Methods of Social Research. Bollen's primary areas of statistical research are in structural equation models, longitudinal methods, and latent growth curve models.

