

# Longitudinal Modeling and Missing Data Handling In Blimp

## Abstract

The major feature that distinguishes Blimp from other latent variable modeling software packages is that it does not work directly with the multivariate distribution of the analysis variables. Rather, complex multivariate models are represented as sequence of simpler univariate equations. The advantage of this specification is that the individual regression equations can feature mixtures of categorical and normal variables, continuous variables with skewed distributions, interactive or nonlinear terms with latent or manifest variables, and other complex constructions that are difficult to model appropriately with conventional estimation and missing data handling schemes. The talk will introduce attendees to factored regression specifications for longitudinal models and will show how this powerful specification strategy applies to longitudinal models with missing data. The talk will address complexities such as mixed response types, nonlinear and interactive effects, and models for missing not at random processes.

## Bio

Craig Enders is a Professor and the Area Chair of Quantitative Psychology in the Department of Psychology at University of California—Los Angeles. Dr. Enders' primary research focus is on analytic issues related to missing data analyses, and he leads the research team responsible for developing the Blimp software application for missing data analyses. The second edition of his book, *Applied Missing Data Analysis*, was recently published in 2022.