EffectLiteR: Detailed Effect Analysis Using Structural Equation Modeling (Part 1)

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In the first part, we present a framework for estimating average and conditional effects of a discrete treatment variable on a continuous outcome variable, conditioning on categorical and continuous covariates. Using the new approach, termed EffectLiteR approach, researchers can consider conditional treatment effects given values of all covariates in the analysis and various aggregates of these conditional treatment effects such as average effects or conditional effects given values of a subset of covariates. Building on an extended multigroup structural equation model with stochastic group sizes, the EffectLiteR approach combines the following strengths: (1) it allows for latent covariates and outcome variables, (2) it permits (higher order) interactions between the treatment variable and categorical and (latent) continuous covariates, and (3) covariates can be treated as stochastic rather than fixed. We illustrate the Mplus implementation of the approach using two examples (one with a continuous covariate and one with a categorical covariate).