

## Information for Files for Chapter 24: A Flexible SEM Approach for Analyzing Means

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SEM analyses for all multiple group (MG) models and for the two multiple indicator variable models for one-way ANOVA with latent variables (MIV\_LC\_1\_WAY\_LV and MIV\_MC\_1\_WAY\_LV) can be conducted using the demo Mplus program available without cost on the Mplus website: (<http://www.statmodel.com/demo.shtml>). All other MIV models must be run on the full base version of Mplus due to limits on the number of observed variables used in the analysis.

### Three Types of Files

1. Files with an appended name of INP are syntax files for analyzing data with MPLUS using SEM methods.
2. Files with an appended name of DAT are data files for the Mplus analyses. These files should be in the same folder as the INP files when conducting your analyses.
3. Files with an appended name of SAS are syntax files for analyzing data with SAS using ordinary least squares regression methods.

### Abbreviations Used in File Names for Mplus INP files

MIV: Multiple Indicator Variable Model

MG: Multiple Group Model

UW: Analyses based on unweighted means in a two-way ANOVA

W: Analyses based on weighted means in a two-way ANOVA

LV: SEM analyses of differences in means of latent variables

R1: SEM analyses of differences in means of latent variables with Y1 as the referent measure

R2: SEM analyses of differences in means of latent variables with Y2 as the referent measure

HOMOGEN: Analysis involved in evaluating homogeneity of covariance matrices for SEM MANOVA design.

ROBUST: SEM analyses for MANOVA designs without requiring normality or homogeneity of covariance matrices.

MC: Represents the more constrained model for any particular analysis

LC: Represents the less constrained model for any particular analysis

COPE, GENDER, INTERACTION: Represent the more constrained model for the named effect evaluated in the two-way ANOVA

Embedded in the file names are abbreviations for the type of analysis: 1\_WAY\_ANOVA, 1\_WAY\_ANCOVA, 1\_WAY\_MANOVA, 2\_WAY (for two-way ANOVA), 1\_WAY\_LV (for one-way ANOVA with the latent variable being the dependent variable)