



Syntax for two stage multiple imputation SEM

The new syntax for the two-stage multiple imputation SEM method consists of a new option and three new keywords for the LISREL OU command and the LISREL Output SIMPLIS command.

1. OU command in LISREL

Purpose

To specify the estimation methods to be used and to specify the results to be produced. For keywords and options on this command not related to the MI2S routine, please refer to the [LISREL Syntax Guide](#).

Status

Required.

Syntax

OU <keywords> <options>

The existing keywords and options for the OU command are described in the [LISREL Syntax Guide](#) which is available via the Help menu. In this new MI2S implementation, the ME keyword is required to specify the method of estimation and only the DWLS, ULS, and WLS options are permitted for two-stage multiple imputation SEM (MI2S) for ordinal variables and a mixture of continuous and ordinal variables. The ML method is only available for covariance structures for continuous variables. In the case of continuous variables, the single group LISREL model is fitted to the sample correlation matrix using DWLS, ULS, or WLS estimation if the SC option is specified.

1.1 MI2S option

Purpose

To specify the two-stage multiple imputation structural equation modeling method.

Status

Optional, unless the two-stage multiple imputation structural equation modeling method is desired.

Syntax

MI2S

1.2 IM Keyword

Purpose

To specify the MCMC or FCS method for multiple imputation.

Status

Optional.

Syntax

IM = <method>

where <method> denotes either MC for the MCMC method or FC for the FCS method.

Example

IM = FC

Default

IM = MC

1.3 NM Keyword

Purpose

To specify the number of multiple MCMC or FCS imputations.

Status

Optional.

Syntax

NM = <number>

where <number> denotes a positive integer greater than zero.

Example

NM = 50

Default

NM = 10

1.4 IX Keyword

Purpose

To specify the integer starting value (random seed) for the random number generator.

Status

Optional, unless a specific starting random seed is desired.

Syntax

IX = <number>

where <number> denotes a positive integer greater than zero.

Example

IX = 4087

Default

IX = 123456

2 LISREL Output command in SIMPLIS

Purpose

To request the results to be printed in terms of the specific LISREL model, to specify the methods to be used, and to specify the results to be produced. For keywords and options on this command not related to the MI2S routine, please refer to the [SIMPLIS Syntax Guide](#).

Status

Optional, unless the two-stage multiple imputation SEM method is desired.

Syntax

LISREL Output <keywords> <options>

The existing keywords and options for the LISREL Output command are described in the [SIMPLIS Syntax Guide](#) which is available via the Help menu. In this new MI2S implementation, the ME keyword is required to specify the method of estimation and only the DWLS, ULS, and WLS options are permitted for two-stage multiple imputation SEM (MI2S) for ordinal variables and a mixture of continuous and ordinal variables. The ML method is only available for covariance structures for continuous variables. In the case of continuous variables, the single group LISREL model is fitted to the sample correlation matrix using DWLS, ULS, or WLS estimation if the SC option is specified.

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Optional, unless the two-stage multiple imputation structural equation modeling method is desired.

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