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> **gsem lclass options —** Fitting models with latent classes

Description Syntax Options Remarks and examples Also see

Description

gsem can fit models with categorical latent variables having specified numbers of latent classes. Some parameters can vary across classes while others are constrained to be equal across classes.

gsem performs such estimation when the lclass() option is specified. The lcinvariant(*pclassname*) option specifies which parameters are to be constrained to be equal across the latent classes.

Syntax

gsem *paths* ..., ... lclass(*lcname #* [, base(*#*)]) <u>lcin</u>variant(*pclassname*)

lclass_options	Description
lclass()	fit model with latent classes
lcinvariant(*pclassname*)	specify parameters that are equal across latent classes

pclassname	Description
cons	intercepts and cutpoints
coef	fixed coefficients
<u>err</u>var	covariances of errors
scale	scaling parameters
all	all the above
none	none of the above

lcinvariant(errvar scale) is the default if lcinvariant() is not specified.

Options

lclass(*lcname #* [, base(*#*)]) specifies that the model be fit as described above.

lcname specifies the name of a categorical latent variable, and *#* specifies the number of latent classes. The latent classes are the contiguous integers starting with 1 and ending with *#*.

base(*#*) specifies the class of *lcname* to be treated as the base class. The default is base(1).

lcinvariant(*pclassname*) specifies which classes of parameters of the model are to be constrained to be equal across the latent classes. The classes are defined above. The default is lcinvariant(errvar scale).

Remarks and examples

See [SEM] **Intro 2**, and see [SEM] **Example 50g**, [SEM] **Example 51g**, and [SEM] **Example 52g**.

Also see

[SEM] **gsem** — Generalized structural equation model estimation command

[SEM] **Intro 2** — Learning the language: Path diagrams and command language

[SEM] **Example 50g** — Latent class model

[SEM] **Example 51g** — Latent class goodness-of-fit statistics

[SEM] **Example 52g** — Latent profile model