**estat lcogf — Latent class goodness-of-fit statistics**

### Description

`estat lcogf` is for use after `gsem` but not `sem`.

`estat lcogf` displays a variety of overall goodness-of-fit statistics for latent class models.

### Menu

Statistics > LCA (latent class analysis) > Goodness of fit

### Syntax

```
estat lcogf [, nodescribe]
```

### Option

`nodescribe` suppresses the descriptions of the goodness-of-fit measures.

### Remarks and examples

`estat lcogf` reports AIC and BIC for the fitted model.

For standard latent class models, `estat lcogf` also reports a likelihood-ratio test of the fitted model versus the saturated model. The likelihood-ratio statistic is also known as the $G^2$ statistic.

See [SEM] Example 51g.

### Stored results

`estat lcogf` stores the following in `r()`:

Scalars

- `r(chi2_ms)` = test of target model against saturated model
- `r(df_ms)` = degrees of freedom for `r(chi2_ms)`
- `r(p_ms)` = $p$-value for `r(chi2_ms)`
- `r(aic)` = Akaike information criterion
- `r(bic)` = Bayesian information criterion
References


Also see

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

[SEM] **gsem postestimation** — Postestimation tools for gsem

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

[R] **estat ic** — Display information criteria