Title

> **gllamm** — Generalized linear and latent mixed models

Description   Remarks and examples   References   Also see

Description

GLLAMM stands for generalized linear latent and mixed models, and `gllamm` is a Stata command for fitting such models written by Sophia Rabe-Hesketh (University of California–Berkeley) as part of joint work with Anders Skrondal (Norwegian Institute of Public Health) and Andrew Pickles (King's College London).

Remarks and examples

Generalized linear latent and mixed models are a class of multilevel latent variable models, where a latent variable is a factor or a random effect (intercept or coefficient), or a disturbance (residual). The `gllamm` command for fitting such models is not an official command of Stata; it has been independently developed by highly regarded authors and is itself highly regarded. You can learn more about `gllamm` by visiting http://www.gllamm.org.

`gllamm` is available from the Statistical Software Components (SSC) archive. To install, type

    . ssc describe gllamm

    . ssc install gllamm

If you later wish to uninstall `gllamm`, type `ado uninstall gllamm`.

References

Miranda, A., and S. Rabe-Hesketh. 2006. Maximum likelihood estimation of endogenous switching and sample selection models for binary, ordinal, and count variables. *Stata Journal* 6: 285–308.

Rabe-Hesketh, S., and B. S. Everitt. 2007. *A Handbook of Statistical Analyses Using Stata*. 4th ed. Boca Raton, FL: Chapman & Hall/CRC.

Rabe-Hesketh, S., A. Pickles, and C. Taylor. 2000. sg129: Generalized linear latent and mixed models. *Stata Technical Bulletin* 53: 47–57. Reprinted in *Stata Technical Bulletin Reprints*, vol. 9, pp. 293–307. College Station, TX: Stata Press.

Rabe-Hesketh, S., and A. Skrondal. 2012. *Multilevel and Longitudinal Modeling Using Stata*. 3rd ed. College Station, TX: Stata Press.

Rabe-Hesketh, S., A. Skrondal, and A. Pickles. 2002. Reliable estimation of generalized linear mixed models using adaptive quadrature. *Stata Journal* 2: 1–21.

——. 2003. Maximum likelihood estimation of generalized linear models with covariate measurement error. *Stata Journal* 3: 386–411.

Skrondal, A., and S. Rabe-Hesketh. 2004. *Generalized Latent Variable Modeling: Multilevel, Longitudinal, and Structural Equation Models*. Boca Raton, FL: Chapman & Hall/CRC.

Zheng, X., and S. Rabe-Hesketh. 2007. Estimating parameters of dichotomous and ordinal item response models with gllamm. *Stata Journal* 7: 313–333.

The references above are restricted to works by the primary authors of `gllamm`. There are many other books and articles that use or discuss `gllamm`; see http://www.gllamm.org/pub.html for a list.

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Also see

[ME] **meglm** — Multilevel mixed-effects generalized linear model

[ME] **mixed** — Multilevel mixed-effects linear regression

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

[SEM] **intro 5** — Tour of models