

Remarks and corrections for second and later printings of:

Generalized Latent Variable Modeling

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

[Datasets and do-files](#)

Major corrections

- **P. 70**

There are some errors in the text. The corrected page can be downloaded [here](#)

- **P. 74**

There are some errors in the text. The corrected page can be downloaded [here](#)

- **P. 176, third equation**

The expression for c_{jr}^{MC} should be:

$$c_{jr}^{MC} = \frac{\prod_i g(y_{ij} | \mathbf{Q}^k \mathbf{d}_{jr}; \boldsymbol{\vartheta}^k)}{\sum_r \prod_i g(y_{ij} | \mathbf{Q}^k \mathbf{d}_{jr}; \boldsymbol{\vartheta}^k)},$$

- **P. 176, fifth equation**

The expression for c_{jr}^{GH} should be:

$$c_{r_m}^{GH} = \frac{p_{r_m} \prod_i g(y_{ij} | \mathbf{Q}^k \mathbf{a}_r; \boldsymbol{\vartheta}^k)}{\sum_r p_{r_m} \prod_i g(y_{ij} | \mathbf{Q}^k \mathbf{a}_r; \boldsymbol{\vartheta}^k)},$$

- **P. 210**

There are some errors in the text. The corrected page can be downloaded [here](#)

- **P. 211**

There are some errors in the text. The corrected page can be downloaded [here](#)

- **P. 352**

There are some errors for the BIC's in Table 11.2 and the surrounding text. The corrected page can be downloaded [here](#)

- **P. 354**

There are some errors for the BIC's in Table 11.4 and the surrounding text. The corrected page can be downloaded [here](#)

- **P. 409, Table 13.7**

For model \mathcal{M}_0 : Estimate -0.37 (0.34) should be for class 3 whereas estimate -0.73 (0.23) should be for class 2.

We thank Jeroen Vermunt for pointing out mistakes on page 74, Pengsheng Ni for making us aware of the two corrections on page 176 and Dirk Knol for pointing out mistakes on pages 70, 352, 354 and 409.

Minor corrections

- **P. 23, last displayed equation**

Should be

$$\Pr(y_i|\mu_i) = \binom{n}{y_i} \mu_i^{y_i} (1 - \mu_i)^{(1-y_i)n},$$

- **P. 124, log link**

Replace “apart from the intercept” by “for all covariates that do not appear in the random part of the model”

- **P. 124, line -5**

Replace “Section 4.28” by “equation (4.28)”

- **P. 125, line -13**

Should be

$$\frac{(16/15)^2}{\pi^2/3} \approx 0.35$$

- **P. 293, line 2**

Replace $\hat{\beta}_i$ by $-\hat{\beta}_i$

- **P. 308, last two displayed equations**

Should be

$$\Pr(y_{tj}=1|\mathbf{x}_{tj}, y_{t-1,j}=0, \zeta_j) = \frac{\exp(\mathbf{x}'_{tj}\boldsymbol{\beta} + \zeta_j)}{1 + \exp(\mathbf{x}'_{tj}\boldsymbol{\beta} + \zeta_j)},$$

and

$$\Pr(y_{tj}=1|\mathbf{x}_{tj}, y_{t-1,j}=1, \zeta_j) = \frac{\exp(\mathbf{x}'_{tj}\boldsymbol{\beta} + \gamma + \lambda\zeta_j)}{1 + \exp(\mathbf{x}'_{tj}\boldsymbol{\beta} + \gamma + \lambda\zeta_j)}.$$

- **P. 329, line -19**

Replace “four thresholds” by “three thresholds”

- **P. 329, line -18**

Replace “ $\kappa_{1i}, \dots, \kappa_{4i}$ ” by “ $\kappa_{i1}, \kappa_{i2}, \kappa_{i3}$ ”

- **P. 353, displayed equation**

Should be

$$g(y_i; \mu_i) = \frac{y_i!}{y_i!(8 - y_i)!} \mu_i^{y_i} (1 - \mu_i)^{8 - y_i}.$$

- **P. 358, line -18**

Should be: “probabilities 0.02, 0.15, 0.45, 0.22, 0.09 and 0.09, respectively...”

- **P. 359, Caption of Figure 11.2**

Should be “...for components $c=1, \dots, 6$ when...”

- **P. 370, line -14**

Replace “Hall (1997)” by Hall (2000)”

- **P. 407, Table 13.6**

Deviance for model with 3 classes should be 23.68 instead of 23.58

- **P. 433, line -6**

After “... count variable.”, insert “This variable is the product of self-reported drinking frequency (the number of days in the past two weeks with any drinking) and drinking intensity (the average number of drinks on a day with any drinking), rounded to the nearest integer.”

- **P. 461, lines 4-5**
Replace “Hall, D. B. 1997” by “Hall, D. B. 2000”
- **P. 476, line 16-18**
Reference should be:

Rabe-Hesketh, S. and Skrondal, A. (2005). *Multilevel and Longitudinal Modeling Using Stata*. College Station, TX: Stata Press.

We are very grateful to Dirk Knol for pointing out many of these corrections.

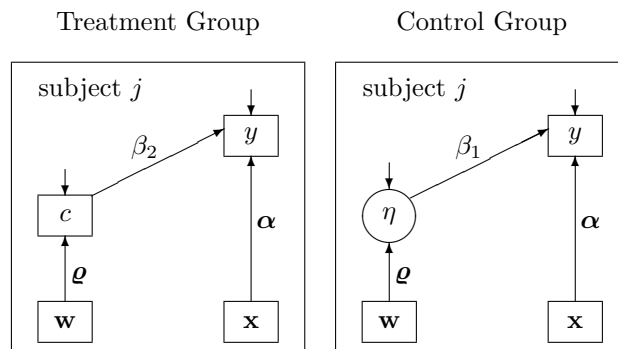
Remarks

- **P. 43, line -9 to -8**
Note that omitting the offset $\ln(d_{ir})$ leads to an equivalent model if a dummy variable is used for each risk set. We thank Harvey Goldstein for pointing this out.
- **P. 113, line -17**
Omitted reference on robustness:

Heagerty, P. J. and Kurland, B. F. (2001). Misspecified maximum likelihood estimates and generalized linear mixed models. *Biometrika* **88**, 973-985.
- **P. 199, line -5** Add reference:

Robins, J. M., Rotnitzky, A. G. and Zhao, L. P. (1995). Analysis of semiparametric regression models for repeated outcomes in the presence of missing data. *Journal of the American Statistical Association* **90**, 106-121.
- **P. 216**
From Stata 9 there is a command for linear mixed models called `xtmixed`. From Stata 10 there are commands `xtmelogit` and `xtmepoisson` implementing adaptive quadrature for random effects logistic and Poisson regression.
- **Section 10.2**
A useful reference for latent growth curve models with continuous responses is

McArdle, J. J. (1988). Dynamic but structural equation modeling with repeated measures data. In J. R. Nesselrode and R. B. Cattell (Eds.). *Handbook of Multivariate Experimental Psychology*, Volume II. New York: Plenum, pp. 561-614.
- **P. 432**
Readers might find a path diagram for the CACE model useful:



We would appreciate to be informed of further remarks and corrections; please email Sophia Rabe-Hesketh: sophiarh@berkeley.edu.