Bayesian Hierarchical Modeling

erasmus group

March 22, 2015

goal

- provide an overview of the flexibility using this approach
- benefits over classical estimation of multilevel models
- ▶ implement models in R & JAGS

primary literature:

- chapters 16 & 17 of Gelman & Hill (2006)
- ► Rouder, Morey, & Pratte (in press)

Gelman, A., & Hill, J. (2006). *Data analysis using regression and multilevel/hierarchical models*. Cambridge University Press.

Rouder, J. N., Morey, R. D., & Pratte, M. S. (in press). Hierarchical Bayesian models. In *New Handbook of Mathematical Psychology* (Vol. 1).