

SOME TECHNICAL DETAILS

CENTERED POOLED EFFECT

The most common way to represent a normal distribution is with the usual mean and sd parameters:

$$x_j \sim N(\mu, \sigma)$$

This is equivalent to:

$$\begin{aligned}\tilde{x}_j &\sim N(0, 1) \\ x_j &= \mu + \tilde{x}_j \sigma\end{aligned}$$

Centered coefficient

$$\text{logit}(p_i) = \alpha_{actor[i]}$$

$$\alpha_j \sim \text{Normal}(\alpha_0, \sigma_\alpha), \text{ for } j = 1..7$$

$$\alpha_0 \sim \text{Normal}(0, 1.5)$$

$$\sigma_\alpha \sim \text{Exponential}(1)$$