

Graphical models

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R Markdown

$$\begin{aligned}\mu_\nu &\sim \text{Normal}(0, 300) \\ \sigma_\nu &\sim \text{Uniform}(0, 1000)\end{aligned}$$

$$\begin{aligned}\mu_\tau &\sim \text{Uniform}(0, 1000) \\ \sigma_\tau &\sim \text{Uniform}(0, 1000)\end{aligned}$$

$$\begin{aligned}\mu_\nu &\sim \text{Normal}(,) \\ \sigma_\nu &\sim \text{Uniform}(0, 1000)\end{aligned}$$

$$\begin{aligned}\mu_\nu &\sim \text{Normal}(,) \\ \sigma_\nu &\sim \text{Uniform}(0, 1000)\end{aligned}$$

$$\begin{aligned}\sigma_\delta &\sim \text{Uniform}(0, 250) \\ \nu_{ij} &\sim \text{Normal}(\mu_\nu, \sigma_\nu) \\ \delta_{ijk} &\sim \text{Normal}(\nu_{ij}, \sigma_\delta)\end{aligned}$$

$$\begin{aligned}\alpha_j &\sim \text{Normal}(\mu_\alpha, \sigma_\alpha) \\ \beta_j &\sim \text{Normal}(\mu_\beta, \sigma_\beta) \\ \tau_i &\sim \text{Normal}(\mu_\tau, \sigma_\tau)\end{aligned}$$

$$Y_{ijk} \sim \text{Wiener}(\alpha_j, \tau_i, \beta_j, \delta_{ijk})$$

$$\begin{matrix} i^{th} & \text{participant} \\ j^{th} & \text{task} \\ k^{th} & \text{trial} \end{matrix}$$

$$\begin{aligned}\mu_\nu &\sim \text{Normal}(0, 300) \\ \sigma_\nu &\sim \text{Uniform}(0, 1000)\end{aligned}$$

$$\begin{aligned}\mu_\tau &\sim \text{Uniform}(0, 1000) \\ \sigma_\tau &\sim \text{Uniform}(0, 1000)\end{aligned}$$

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$$\begin{aligned}\tau_i &\sim \text{Normal}(\mu_\tau, \sigma_\tau) \\ \beta_j &\sim \text{Normal}(\mu_\beta, \sigma_\beta)\end{aligned}$$

$$Y_{ijk} \sim \text{Wiener}(\alpha, \tau_i, \beta_j, \delta_{ijk})$$

$$\begin{matrix} i^{th} & \text{participant} \\ j^{th} & \text{task} \\ k^{th} & \text{trial} \end{matrix}$$