

$$\begin{aligned}
m_0: \text{ActEffort} &\sim \text{GammaPoisson}(\lambda, \phi) \\
\log(\lambda) &\sim \alpha \\
\phi &\sim \text{Exponential}(1) \\
\alpha &\sim \text{Normal}(0,2)
\end{aligned}$$

$$\begin{aligned}
m_1: \text{ActEffort}_i &\sim \text{GammaPoisson}(\lambda_i, \phi) \\
\log(\lambda_i) &\sim \alpha_{\text{Cplx}} \times \text{Cplx}_i \\
\phi &\sim \text{Exponential}(1) \\
\alpha_{\text{Cplx}} &\sim \text{Normal}(0,3)
\end{aligned}$$

$$\begin{aligned}
m_2: \text{ActEffort}_i &\sim \text{GammaPoisson}(\lambda_i, \phi) \\
\log(\lambda_i) &\sim \alpha_{\text{Acap}} \times \text{Acap}_i \\
\phi &\sim \text{Exponential}(1) \\
\alpha_{\text{Acap}} &\sim \text{Normal}(0,3)
\end{aligned}$$

$$\begin{aligned}
m_3: \text{ActEffort}_i &\sim \text{GammaPoisson}(\lambda_i, \phi) \\
\log(\lambda_i) &\sim \alpha_{\text{Pcap}} \times \text{Pcap}_i \\
\phi &\sim \text{Exponential}(1) \\
\alpha_{\text{Pcap}} &\sim \text{Normal}(0,3)
\end{aligned}$$

