



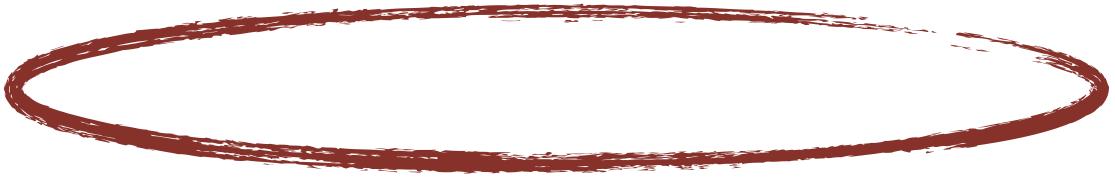
ADDING REGULARIZING PRIORS FOR BLOCK



Outcome: L_i = pulled left

 $L_i \sim Bernoulli(p_i)$ $logit(p_i) = \alpha_{actor[i]} + \gamma_{block[i]} + \beta_{treatment[i]}$

$$\gamma_j \sim Normal(0, \sigma_{\gamma}), \text{ for } j=1..6$$





This estimates how similar the γ_i coefficients are to each other and changes the estimates accordingly

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REGULARIZING PRIOR FOR THE ACTOR COEFFICIENT

Outcome: L_i = pulled left

$$\begin{split} L_i \sim Bernoulli(p_i) \\ logit(p_i) &= \alpha_{actor[i]} + \gamma_{block[i]} + \beta_{treatment[i]} \\ \gamma_j \sim Normal(0, \, \sigma_\gamma), \text{for } j = 1..6 \\ \alpha_j \sim Normal(\alpha_0, \, \sigma_\alpha), \text{for } j = 1..7 \end{split}$$