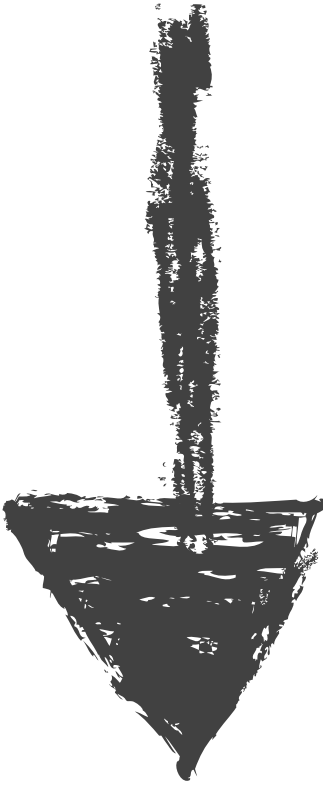
ADDING REGULARIZING PRIORS FOR BLOCK

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_j coefficients are to each other and changes the estimates accordingly

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_j coefficients are to each other and changes the estimates accordingly

REGULARIZING PRIOR FOR THE ACTOR COEFFICIENT

Outcome: L_i = pulled left

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