

## STATISTICAL RETHINKING 2025

### WEEK 4

You can use MCMC to solve these problems. It's not required. But these are simple models, so a good context in which to get used to running and inspecting MCMC output.

1. Revisit the marriage, age, and happiness collider bias example from Chapter 6. Run models `m6.9` and `m6.10` again (pages 178–179). Compare these two models using both PSIS and WAIC. Which model is expected to make better predictions, according to these criteria, and which model yields the correct causal inference?
2. Reconsider the urban fox analysis from last week's homework. On the basis of PSIS and WAIC scores, which combination of variables best predicts body weight (`W, weight`)? What causal interpretation can you assign each coefficient (parameter) from the best scoring model?