27_HOMEWORK5_changing_priors_and_likelihood

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0.1 Homework 4

0.1.1 Part 1: Changing the priors of the model

Change the standard deviation in all our priors to 3 (rather than 10). Compute the posteriors with `pymc3` and compare them with the posteriors we got when we had priors with a standard deviation of 10.

What do you notice?

0.1.2 Part 2: Changing the likelihood of the model

Revert the priors back to the original values (standard deviations of 10). Now, change the likelihood function of the model such that we estimate the mean RT for *each* and the difference in RTs between *every* and *each* rather than what we have now (the mean RT for *every* and the difference in RTs between *each* and *every*).

Why are the new posterior means different? That is, how are they mathematically related to the posterior means we estimated in the original version of the model?

As far as the theoretical question is concerned, does this new model suggest a different answer to the theoretical question? (Hint: no, the answer the same. Why?)

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