

# Review ISZ\_7

## reviewers

Imię i Nazwisko 1	Dominik Żurek	Points:	20/27
Imię i Nazwisko 2	Igor Ratajczyk	Percent:	74%

### Problem formulation [4 | 5 pts]:

- is the problem clearly stated [1 pt]
- what is the point of creating model, are potential use cases defined [1 pt]
- where do data comes from, what does it contain [1 pt]
- DAG has been drawn [1 pt]
- confoundings (pipe, fork, collider) were described [0 pt]

Confoundings are mentioned, but the description doesn't explain the relationship between variables.

### Data preprocessing [1 | 2 pts]:

- is preprocessing step clearly described [1 pt]
- reasoning and types of actions taken on the dataset have been described [0 pt]

No explanation why MinMax scalling was applied to the data.

### Model [4 | 4 pts]

- are two different models specified [1 pt]
- are difference between two models explained [1 pt]
- is the difference in the models justified (e.g. does adding additional parameter makes sense?) [1 pt]

- are models sufficiently described (what are formulas, what are parameters, what data are required) **[1 pt]**

## Priors [2 | 4 pts]

- Is it explained why particular priors for parameters were selected **[0 pt]**  
No comments on why particular values were selected for the priors

- Have prior predictive checks been done for parameters (are parameters simulated from priors make sense) **[1 pt]**

- Have prior predictive checks been done for measurements (are measurements simulated from priors make sense) **[1 pt]**

- How prior parameters were selected **[0 pt]**  
We can't understand the process of selecting the prior parameters because no explanation was supplied.

## Posterior analysis (model 1) [3 | 4 pts]

- were there any issues with the sampling? if there were what kind of ideas for mitigation were used **[1 pt]**  
We assume that no issues were encountered. No implicit mention of aliasing sampling errors.

- are the samples from posterior predictive distribution analyzed **[1 pt]**

- are the data consistent with posterior predictive samples and is it sufficiently commented (if they are not then is the justification provided) **[1 pt]**

- have parameter marginal distributions been analyzed (histograms of individual parameters plus summaries, are they diffuse or concentrated, what can we say about values) **[0 pt]**

Parameter marginal distributions were not analysed using histograms or any other kind of plots.

## Posterior analysis (model 2) [3 | 4 pts]

- were there any issues with the sampling? if there were what kind of ideas for mitigation were used **[1 pt]**

We assume that no issues were encountered. No implicit mention of aliasing sampling errors.

- are the samples from posterior predictive distribution analyzed **[1 pt]**
  
- are the data consistent with posterior predictive samples and is it sufficiently commented (if they are not then is the justification provided) **[1 pt]**
  
- have parameter marginal distributions been analyzed (histograms of individual parameters plus summaries, are they diffuse or concentrated, what can we say about values) **[0 pt]**

Parameter marginal distributions were not analyzed using histograms or any other kind of plots.

### Model comparison [3 | 4 pts]

- Have models been compared using information criteria **[1 pt]**
  
- Have result for WAIC been discussed (is there a clear winner, or is there an overlap, were there any warnings) **[0.5 pt]**  
 The discussion is brief and warnings were not covered in it.
  
- Have result for PSIS-LOO been discussed (is there a clear winner, or is there an overlap, were there any warnings) **[0.5 pt]**  
 The discussion is brief and warnings were not covered in it.
  
- Was the model comparison discussed? Do authors agree with information criteria? Why in your opinion one model better than another **[1 pt]**