

Review ISZ_8

reviewers

Imię i Nazwisko 1	Karolina Woźniak	Points:	23.5/27
Imię i Nazwisko 2	Maciej Górnik	Percent:	87%

Problem formulation [4.5 | 5 pts]:

- is the problem clearly stated [1 pt]
Problem statement is clear.
- what is the point of creating model, are potential use cases defined [1 pt]
Point and potential use case defined.
- where do data comes from, what does it contain [1 pt]
Authors stated the source and data contains.
- DAG has been drawn [1 pt]
Dag diagram is extensive and well done overall.
- confoundings (pipe, fork, collider) were described [0.5 pt]
Cofundings are visible on DAG, but there is no description of them

Data preprocessing [2 | 2 pts]:

- is preprocessing step clearly described [1 pt]
Every step is described clearly.
- reasoning and types of actions taken on the dataset have been described [1 pt]
Every action done is reasonable.

Model [4 | 4 pts]

- are two different models specified [1 pt]
Yes

- are difference between two models explained **[1 pt]**
Yes

- is the difference in the models justified (e.g. does adding additional parameter makes sense?) **[1 pt]**
Yes

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

Priors [4 | 4 pts]

- Is it explained why particular priors for parameters were selected **[1 pt]**
Yes, prior selection makes sense

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

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

- How prior parameters were selected **[1 pt]**
It is clearly described and it makes sense

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]**
There were not, sampling is done okay

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

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

- 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]**
There are no histograms of individual parameters, no analysis was done

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]**
There were not, sampling was okay.
- are the samples from posterior predictive distribution analyzed **[1 pt]**
Yes
- are the data consistent with posterior predictive samples and is it sufficiently commented (if they are not then is the justification provided) **[1 pt]**
Data is consistent and sufficiently commented
- 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]**
There are no histograms of individual parameters, no analysis was done

Model comparison [3 | 4 pts]

- Have models been compared using information criteria **[1 pt]**
Yes
- Have result for WAIC been discussed (is there a clear winner, or is there an overlap, were there any warnings) **[1 pt]**
Yes
- Have result for PSIS-LOO been discussed (is there a clear winner, or is there an overlap, were there any warnings) **[1 pt]**
Yes
- Was the model comparison discussed? Do authors agree with information criteria? Why in your opinion one model better than another **[0 pt]**
Comparison discussion not sufficient. Report is lacking summary.