Dear David,

The Research Master's Thesis Committee has reviewed your very interesting and well-written thesis proposal today, based on two reviews provided by Jonas Haslbeck (1) and myself (2). As you will see in the appended reviews, we think that the topic is highly interesting and relevant and that the writing is good. That said, we also identified some missing explanations and formulated some questions. I would like you to address the issues raised in both reviews in a letter, and revise your proposal accordingly. In my view, the most important points are:

- 1. The simulation study is too unclear. I am all in favor of exploration, and I don't need you to set up the data-generating models yet, but it should at the very least be clear how you pick and combine different ways to estimate marginal likelihoods with your algorithm and BMA. I need to learn a bit more about the process you plan to use.
- 2. How you will assess performance of the algorithm is also not clear enough. From what I understand now you will have a posterior probability of including each edge and can compare it to whether this edge was in the data-generating model or not. But how do you use these now for your assessment?

In addition, please also respond to the other remaining points raised by the reviewers. R1 provides some really useful feedback and pointers which will help you to further improve your proposal. When you choose not to follow up on a particular comment or suggestion please argue why.

You are expected to send your reply and revised proposal within two weeks. Please upload your reply on CANVAS. This first version of the proposal received a grade of 7.5. We would like to mention that the grade is not a simple translation of all 2's, 1's, etc. in the reviews. The committee discussed the grading of your proposal in relation to other research master proposals. The second grade will be based on how well you took suggestions into account or, if applicable, how convincing your argumentation is not to take some suggestions into account. The end grade will be a weighted grade, with 2/3 coming from the initial proposal, and 1/3 on your reply.

I understand it is difficult to add things to your proposal given the word limit. I would like to point out that there are some sections in the proposal you can cut to save space (see my review). Plus, I believe you had some words left.

Good luck with the revision process; I look forward to reading your response.

Best regards, Julia Haaf