Note: we followed a semi structured interview protocol where we covered all the following questions. However, several of our questions were based off of participants responses.

Interview w/

<About myself>

We are conducting a study to evaluate an interactive visualization tool that we have created.

In this interview, we will present you with different ways of visualizing the prior density. We would like to understand how you use the visualization (and other similar visualizations) to set priors for the described model, as well as interpret the results of the model. Thus, we would request you to think aloud --- verbalise your thoughts and the strategies that you are using to make your decision --- as you interact with the visualization(s). We expect this session to last about 45-50 mins. During this study, we would like to record the audio.

We request you to also share your screen with us, which we'd like to record for additional information. However, this is optional and you can choose not to let your screen be recorded.

The study team will also be taking notes during the study session, based on their observations.

Your data will not be shared with anyone outside the members of the study group. If you agree to proceed, then you consent to all the things mentioned above?

The purpose of the interview is not to judge your ability to set priors, but for us to understand what sorts of interfaces might help you better set priors. So if something doesn't make sense or doesn't seem useful, we really want to know that so that we can improve it in future designs. Similarly if something does seem useful, that is important for us to know as well.

This consists of three pages. The first page is what you saw in the survey. You saw the prior <<u><insert vis type></u> visualization in the survey. You set the prior as: <u><describe chosen priors for</u> each parameter>.

1. *(Ask them to open the link we send them)* Looking at the interface, and the prior that you chose. Can you walk me through what you did with the interface and how you decided to choose this prior?

- 2. Now, let's move on to the second page? In this document, we have three visualizations. Obviously, you have seen one of them before.
- 3. Have you made such decisions in the past? What challenges have you faced?

- Could you look at <intercept vis 1>
 - a. Do you think the information presented in this visualization would affect your choice of priors? How would you (if at all) use this information?
 - b. Could you contrast this with the information presented in the graph that you saw in the survey?
 - c. Would you change your choice of prior in any way?

5. Could you look at <mark><intercept vis 2></mark>

- a. Do you think the information presented in this visualization would affect your choice of priors? How would you (if at all) use this information?
- b. Could you contrast this with the information presented in the graph that you saw in the survey and with *<intercept vis 1>*?
- c. Would you change your choice of prior in any way?

6. What other information do you consider when choosing your priors? Are there any considerations specific to the intercept parameter? *If they have mentioned something in their response in the survey, describe that information to them.*

7. Now, let's go to the next page. This is the final page, and we will be doing the same thing but with the mean difference parameter instead.

- 8. Could you look at *<mean diff vis 1>*
 - a. Do you think the information presented in this visualization would affect your choice of priors? How would you (if at all) use this information?
 - b. Could you contrast this with the information presented in the graph that you saw in the survey?
 - c. Would you change your choice of prior in any way?

- 9. Could you look at <mean diff vis 2>
 - a. Do you think the information presented in this visualization would affect your choice of priors? How would you (if at all) use this information?
 - b. Could you contrast this with the information presented in the graph that you saw in the survey and with *<mean diff vis 1>*?
 - c. Would you change your choice of prior in any way?

10. What other information would have been helpful for you in selecting these priors.

11. Can you think of other instances in your past while choosing priors, what other information did you consider? Are there any considerations specific to the mean difference parameter? *If they have mentioned something in their response in the survey, describe that information to them.*