Review of Esther’s Final Project

I cloned Esther’s project and was able to open her R script and manuscript perfectly after installing one of the packages she used that I did not have (lmerTest). There are good notes in the R script that make it easy to follow the steps she took. It looks like in the script that some of the variables were equalized using a log transformation, but this was not indicated in the manuscript. I am not familiar enough with log transformations to be able to tell which variables were changed and why, but I think this is something important that needs to be explained in the write up of the results.

I am missing a quick intro section with the study’s research questions so that I can understand better what the motivations are and what is being looking for in the data analysis. Saying that, in the intro of the results section there is a quick review of what the two research questions were so that helps a lot. The intro of the data analysis section is very clear. However, though the author mentions that first the data from the EPT will be presented and then the results from the AJT, only the results from the EPT were presented. Was the author able to answer both research questions with one model?

I really liked the explanation of the model output as it provides a clear picture of what the main effects and interactions mean for the study. A sentence is missing to say that main effects and interactions were tested for using a nested model comparison. Also, I’m pretty sure ‘frequency’ refers to verb frequency but it’s unclear how this was determined or how it was coded for in the model.

The plot does not have a title and instead shows the R code. I think it would look cleaner to hide the R code (echo = FALSE, message = FALSE) and type a title into the Rmd. I am also having a hard time interpreting the plot. Is ‘co’ (in red) the SDC group? The colors are titled ‘proficiency’ but it looks like the 3 groups of participants. What is the predictor on the x-axis, countLog? And what does the 7,8,9 span refer to on the x-axis? Why are all the red responses at the top? It looks like the red group always produced DOM (coded as 1, right?), but aren’t there instances where DOM would not be expected? A more precise title and more precise labels on the axes would help clarify what we are seeing, as well as perhaps a bit of an explanation about the relationship seen between the criterion and the two predictors.

The discussion only addresses the results of production so it looks like the results of the AJT are needed to fully answer both of the research questions. The rest of the manuscript was well organized and easy to read. I enjoyed reviewing Esther’s work!

Review of Julio’s Final Project

I cloned Julio’s project and was able to open his R script and manuscript perfectly in order to see his code, his plots and his models. In his manuscript, the first plot (Figure 1) did not appear centered and so I could only see half of it. However, I was able to reproduce it in the R script in order to see the entire plot. I looked at the Rmd file to see why the plot would have appeared cut off in the word document, but I can’t see what may have caused it since the other plots all appear just fine and have the same formatting in the R chunks of the Rmd file.

In the results section, it would be helpful to always include (Fig.1) or (Fig. 2) so the reader knows exactly which plot the author is referring to. Overall it is mentioned that only one or some of the predictors tested for were significant in each context. In cases as these, should the results of the non-significant predictors in the model be reported as well in order to show what was done? I’m also not sure it is necessary to print the model summaries in the word document, but I like that doing so provides the exact R output for the reader.

In Figure 3, it’s hard to tell what the items are on the x-axis. The author specifies that statistics were only run on three of the items from the EPT because Spanish-speaking monolinguals did not produce DOM in two items of the condition, but there are 5 points on the plots, so this is confusing for me. Maybe a more detailed explanation of the plots would be helpful.

In each context a few sentences are missing to explain that main effects and interactions were tested for, and whether or not you nested model comparisons were used. It is reported that there were no significant covariates or interactions, but it’s unclear how these were tested for. Additionally, I think it would be helpful to explain the negative relationship in Fig 4 and the positive relationship in Fig 5. What does it mean to have a negative or positive relationship between the predictors and the criterion? I know this is explained in more detail in the Discussion section, but as a reader it would be helpful to have a one sentence explanation to accompany the plots in the results as well.

The rest of the manuscript was well organized and easy to read. I enjoyed reviewing Julio’s work!