# Peer Review (Posting)

#### Learning Objective

• Apply multilevel modeling in a research project

#### **Assignment Description**

As part of the peer-review process, your group will submit a revised prospectus and a knitted document of part of your data analysis for peer review. The purpose of the assignment is to make sure you are on track for completing your final paper/presentation, as the equations, plot, interpretation, etc, will likely be part of your final work. Also, you will have a chance to receive feedback from your peers, as well as to learn from your peers' week in the evaluation phase. Posting will be worth 3 points.

Note: If you're working as a group, only one member needs to post to the Discussion Board.

### Steps

- 1. Revise your prospectus to clarify any inconsistency and provide updated information on your data description and data analysis plan. The revised prospectus should include
  - Sufficient background to understand your research
  - Research questions clearly defined
  - A description of the nesting structure of your data
  - Your plan of data analysis
- 2. For this assignment, you will run one multilevel model related to your research questions using R Markdown. You can combine your revised prospectus with your analysis into one R Markdown file, but this is optional. The R Markdown should be named "preliminary\_mlm.Rmd", and should include
  - Model equations for one multilevel analysis
  - Reproducible code of the analysis
  - A coefficient table for the model (e.g., using msummary)
  - A plot illustrating the association between a major predictor in the model and the outcome variable. Include random slopes if appropriate.
  - A short paragraph summarizing the findings from your model addressing your research questions.
    [Note: the equations, code, table, and plot would likely be in your final paper/presentation anyway.]
- 3. Knit your Rmd file to HTML/PDF/Word/Markdown, and upload both the source Rmd file and the knitted file to the GitHub repository for your project. Make sure you don't include any confidential information of your data.
- 4. Upload your revised prospectus to either a) your GitHub repository or b) the dedicated forum on the Discussion board on Blackboard.
- 5. Post the link of your GitHub repository (and your revised prospectus if desired) to the dedicated forum on the Discussion board on Blackboard. For each group, only one post is needed.

## Grading

This assignment involves peer grading, and your peer will use a rubric to be posted to grade your posting.

### **Additional Notes**

You may post your questions to the Slack channel to get help from your peers and instructor.