

Project 3 Info

Project Overview

For project 3, choose a dataset with a hierarchical structure and analyze this using a hierarchical regression methods. The project will include a written report and a class presentation.

The report should contain sections such as introduction, data overview + data visualization, statistical modeling procedures, and results and discussion. The following is a rubric that will be used to assess the report.

Your presentation should be approximately 5 - 8 minutes and mimic the structure of the report with an introduction that frames the research question followed by exploration of the data, an overview of the modeling approach, and a conclusion.

All items are graded with the following scheme, where some have multipliers:

1. **No Credit:** Criterion was not addressed or was written in a way that was not understandable.
2. **Beginning:** Ideas are not clear and supporting ideas are not presented.
3. **Developing:** Ideas are identified but not well supported and developed or are minimally supported and developed.
4. **Advanced:** Ideas are clearly identified and are adequately supported and developed.

Report generalities	Points
Spelling, grammar, writing clarity, paragraphs, section labels, citations, acknowledgements	/8
Appendix with complete code	/4
Introduction	Points
Project motivation	/4
Research question	/4
Data Overview + Data Visualization	Points
Describe variables including with units	/4
Titles, Labels, and Captions for Figures	/4
Figure Clarity (should highlight hierarchical structure)	/4
Figure Quality (should highlight hierarchical structure)	/4
Statistical Modeling Procedure	Points
Define models to fit (with complete notation)	/4
Discussion of how hierarchical model differs from non-hierarchical model	/4
Results and Discussion	Points
Statement and assessment of model assumptions	/4
Comparison of models and defense of model choice	/4
Discuss Results in the context of the research question	/4
Scope of Inference: how can the results be generalized?	/4
Class Presentation	Points
Appropriate use of time: 5 - 8 minutes	/4
Presentation Quality	/8
Presentation Clarity	/8