

Multilevel Models in Quantitative Research

Final Project: Guidelines

The following is a brief list of instructions for the final assignment.

1. The assignment is due at the last class meeting. Late assignments will not be accepted. Any exceptions will only be considered *before* the deadline.
 - Upload the assignment as a PDF to Blackboard. No Word, Pages, HTML, or other type of file will be accepted.
 - Upload an R file with the code used for the assignment. Code written to merge/reshape the original dataset can be omitted. You must include the code you used for the empirical section of the assignment. The code must work.
2. The assignment consists of a "submission of an analysis of real dataset using a multilevel model 3-5 pages of discussion to include a description of the data, model diagnostics, and the subsequent findings". The following is a checklist of what you have to write about:
 - What are is your research question? How does the empirical strategy address this question?
 - Description of the data:
 - Explain what each variable is measuring and provide descriptive statistics such as the values they can take, mean value, etc.. If appropriate, you may also include figures.
 - Do you have missing data?
 - Mention the source of your data.
 - Statistical model:
 - Why do you believe it is an appropriate modeling strategy? Explain the model.
 - Include a formal equation for the model. If you are using a Bayesian model, include your choice of prior distributions.
 - If running a Bayesian model, report non-convergence diagnostics of the MCMC chains.
 - Report model diagnostics.
 - Empirical Findings: Include a table of results and figures (or figure). Figures must include proper labels for the axes and informative titles or captions. Explain your findings.
 - Write a brief conclusion.
3. The format of the report should be professional and easy to read.