

Research Paper Final Submission Instructions

Your final research paper should be structured as an essay that is divided into sections. Your paper should demonstrate your writing ability and ability to properly perform and interpret statistical analyses.

At this point, all of you already have one dependent variable, one main independent variable, and two control variables. You are free to modify your research question or variables if you think that doing so would result in a better paper. Additionally, you may incorporate extra variables to your analysis as deemed appropriate.

The Structure and Content of the Research Paper

I. Introduction (about 1 page)

- What is your research question?
- Why is your research question interesting? Why is your topic important?
- Preview your results
This is a brief and concise summary of your results. People who do not have time to go through the entire paper should get the general idea and conclusion of the paper through the introduction section.
- A statement that explains why you think your results are correlational or causal.

II. Literature Review (about 1/2 page)

- What other work has been done on these issues? What has been found?
- The literature review must include at least two academic papers. You can look for papers on Google Scholar.
- Cite sources in APA format. Click [here](#) to learn more.

In the literature review, you should only talk about papers that are the most relevant to your topic or directly give you some inspiration.

III. Descriptive Analysis and Motivational Evidence (about 1-2 pages, including relevant figures and tables)

- Mention and verbally describe the dataset you are using, your dependent variable, primary independent variable, and control variables. Remember to mention how the variables are named in your dataset. Mention if you constructed new variables or deleted observations. Also, note the number of observations in your data (the number of observations must be greater than 100).
- Present summary statistics for all your variables in a table. Comment on the averages of your variables and anything else you think is interesting or important. Be careful in properly describing the averages of your binary variables.

- Present a graph showing the relationship between your dependent and primary independent variable. You should present a scatter plot if both of your variables are continuous. If any of the two variables is binary, use a bar plot. Summarize what you learn.

IV. Empirical Strategy (about 1 page)

- Shortly recap your research question.
- Write down the main regression model you will use to answer your research question. Your regression model should be as follows:

dependent variable = $a + b_1 \cdot \text{primary independent var} + b_2 \cdot \text{control1} + b_3 \cdot \text{control2} + e$

- You should explain why the regression makes sense. Talk about what each of the coefficients capture and why you think your controls are good controls.

V. Results and Analysis (about 1-2 pages)

- In one or more tables, present the results of your regression analysis. You should present the results without controls and then add controls, one by one, to see what happens to your main coefficient. With two controls, you will have three different specifications.
- Interpret the sign, the value, and the significance level of the coefficient on your primary independent variable across all three specifications. Comment on how and why the coefficient changes or does not change as you add each control.
- Comment on the coefficients on your control variables.
- Interpret the adjusted R^2 of your regression models.
- Explain in detail what you can conclude from your regression results. How do they answer your research questions?
- Explain why you believe that the results you find are correlational or causal. Discuss whether you think there are other variables that are not in the dataset (or not in your regression) that could affect both the dependent variable and your explanatory variables. If so, mention these unobserved/omitted variables and explain how they can lead you to over or underestimate the regression coefficients.

VI. Conclusion (about ½-1 page)

- Summarize your results.
- Given this summary, answer your research question.
- Emphasize again why you think your results are causal or correlational.
- Compare your results with the existing literature.
Are your results similar to what the existing literature suggests? Or do you have contradicting results? If contradicting, what made it so?
- What are the policy implications of your findings?

- Are there suggestions for future research?

References

Write down a References List using [APA style](#) where you cite the papers you reference in the literature review.

Appendix (optional)

If you think that some of the tables and graphs you produced in the *Descriptive Analyses and Motivational Evidence* section are not very useful considering your research question, drop them (and the related comments) from that section, and include them (with the related comments) in the *Appendix*.

Format and Submission

- Approximately 6 to 8 pages long (excluding the References Section and the Appendix Section).
- Use *Times New Roman* with font size 12 and interline space 1.15.
- Tables and figures should be within the main body of the paper. All figures and tables must have a title and be numbered. (e.g., Table 1: Summary Statistics on Income). Tables and figures should appear shortly before or after you mention them in the text for the first time. You should refer to the figures and tables when commenting on your descriptive analyses and results. (e.g., As we can see from Table 1, the average income in my sample is...)
- Submissions need to be made on Canvas. Any member of the group can submit on your group's behalf. Your submission should include the following:
 - Your write-up in PDF format.
 - R code that reproduces the analysis you performed.
 - The dataset used in the analysis if you made significant changes to the data or are using an external dataset (in excel, csv, or rdata format).