Sifeng Li – peer review for Bhoomika's paper01

Title

Well done! Title is very direct and intuitive! One suggestion might be to capitalize first letter of each word in your title!

Author/Contact Info

Well done!

Abstract

I think it's great that you use only one sentence to clearly express what you did in each section of the paper. I love that you pointed out directly which variables are important as doing your analysis! The only thing I would like to suggest is that explicitly say that which measurement of crime you use for your final chosen model. If that's being added, it would be perfect!

Introduction

I love the motivation you addressed at the beginning of the paper to show why it is important to read this paper. I also like you listed all research questions in a concise and clear way. There's nothing to be improved in this part! Great job!

Data

I love your introduction on the context of the dataset, it's very clear and informative! Also, your summary tables of variable definitions and quantitative analysis look neat and nice! Suggestions for this section might be 1) it might be important to put preliminary summary table of statistics on both continuous and categorical variables; 2) try to add more descriptive sentences after each plot/summary table to make sure your readers understand the most important information on you making this EDA.

Methods

I love that you labeled methods for each section clearly and layed out methods you were using in a straightforward way. There's nothing I could think of to improve this section!

Results

I really like that you put result for each research question in a very structured way. The information you wrote down here are enough for me to understand the paper. Also, it's great to have results presented with interpretation after. I especially enjoy reading your interpretation on the first research question! However, I do have suggestions on for the part two, if you choose to say something related to R-squared here, it's better for you to put the summary table in front of your explanation otherwise it's a bit confusing. For part three, I guess there are can be elaboration on it for example, how you use stepwise regression to figure out the suitable variables and how you use ANOVA test to compare models with/without interactions.

Discussion

I really like that you put discussion for each research question in a very structured way. I feel

like with the statistical setting, you explain the choosing model very well. Also, you address the fourth problem on the project sheet in the limitation/next step section pretty clearly, but I feel like you can think of it as a result of whether that's randomly selected sample and say something related to it. One suggestion is that maybe consider about include some real-world setting explanations on the variable selection for example in the way of letting social scientists understand the question.

Mechanics

Well Done! Paper is very easy to follow and has a very structured format.

Statistical Content

Fair enough! Correctly uses technical and non-technical material we have learned in class. Analysis makes sense to me!

References & Citations

Please do not forget to cite all sources with correct format after your discussion section!

Technical Appendix

Easy to follow! Complete analyses: have R code, output, graphs, tables, and comments explaining what you did! One suggestion would be go through your technical appendix again before submitting the final paper and maybe add something detailed explanations on why you used the method.