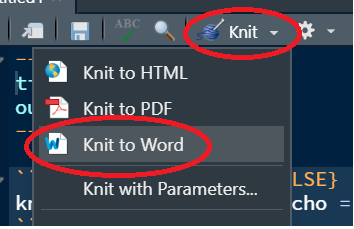
ES218 Project – Peer review

Make sure to read the following guidelines before proceeding:

* You will clone the author’s repo to your local folder. Then you will create a new branch to that repo called *feedback\_<your name>* where you will add/commit two Word documents (outlined later in these instructions).
* You as the reviewer will need to check that all the packages used in the project’s script are installed on your computer. You will know if a package is missing from your computer if the RMD file fails to knit (the error message should be self-explanatory).
* Inline feedback will be done in a Word knitted version of the Rmd file. You can knit to Word using   
    
  Note that feedback pertaining to figure size and layout should be based off of the HTML knitted output and not the Word knitted output
* When completed, commit this Word document and the knitted Word file (with feedback) to the author’s github repo.

1. Author whose project you are evaluating: Peter Brown

1. Evaluate each criterion on a score from 1 to 5 (5 being best):

|  |  |  |
| --- | --- | --- |
| Criterion | Description | Score  ( 1 to 5 ) |
| Complexity of analysis | * Was the analysis thorough? * Did the nature of the analysis involve complex coding procedures? * Did the author go above and beyond what was expected?  (note that a score of 5 should be assigned judiciously) | 4 |
| Reproducibility | * Was the “knitting” of the Rmd file error free? **(if the knitting process produces an error, 3 points should be automatically deducted)** * Were all warnings and messages suppressed from the output? | 5 |
| Presentation  &  Code quality | * Was the document carefully constructed with properly sized figures? * Were the code chunks clear and properly commented? * Were all loaded packages used as intended by the author? | 4 |
| Discussion | * Did the author clearly layout a narrative? * Were the figures and analyses appropriate for what the author was trying to convey? | 4 |

1. Provide thoughtful and constructive feedback. *For example, how could the analysis be improved? Were there errors in the code, if so, what fixes were needed? Are there portions of the script that could have been simplified or re-written in a more succinct way? Did the figures match the narrative? Were there aspects of the analysis that you found novel or unique? Did you learn something new while reviewing the write-up?  
   Make sure to format any code chunks used in your write-up using* ***Courier New*** *font (and maybe change its font color too to distinguish it from the text). Also, indicate the Rmd line number(s) being referenced. You are free to embed snapshots of the html output or Rmd sections via Insert >> Screenshots >> Screen clipping.*

I thought this was a really great topic to explore! I think the overall layout of your project is strong, and it seems to follow a narrative. However, I think you could use more figures and text to improve the presentation of your project and make the narrative even easier to follow.

**Complexity of Analysis:** I liked how you started your analysis by looking at a number of factors that could have impacted mental health in New England: median household income, mortality rate, mentally unhealthy days per month. I also thought it was good to include two different datasets in your analysis to go even more depth to your research question. I think one way to make this analysis more complex would be to analyze the trends within the states in New England. For example, maybe comparing median household income and mentally unhealthy days per months in New England states through a scatterplot or having a boxplot showing the differences in drug mortality rate using more visual examples.

**Reproducibility:** I was able to reproduce the Rmd file error free. Additionally, all warning and messages were suppressed from the output.

**Presentation & Code Quality:** All figures on the document were appropriately sized. The code chunks were appropriately commented and all loaded packages were used by the author. I commented on this, but some of the code chunks were very detailed and thorough, and there may be ways to make the output more succinct. Additionally, it may be helpful to describe the direction of your analysis a little more in the Methods section. That way readers know how the appropriate packages are going to be used and what the different plots and graphs and analyses represent when they get to that point of the analysis.

**Discussion:** As I mentioned previously, I liked how from the Geographical Overview of New England, we were able to instantly notice a couple of trends in the data. From this larger dataset, you broke your data down to answer a more specific research question. I thought this was a great way to initially lay out your narrative. I think how you presented your data was in a good way, but I think you may be able to better visually represent the different portion of your analysis using sub-headers or more description. It also may be beneficial to create more graphs in your analysis of the same type to further show differences in the data set. For example, you created a theoretical QQ plot of drug-poisoned mortality rate, but your first graph after it was a scatterplot comparing MHP and drug poisoning mortality rate. It may be easier to follow the analysis if you added a QQ theoretical QQ plot of MHP.