**AML 612 Homework #8**

**For all questions, please submit your R code, and a doc file with a copy of the screen output and plots (where applicable), and all other relevant files to** [**smtowers@asu.edu**](mailto:smtowers@asu.edu)**.**

**Due Friday April 20th at noon**

**The code in your R files should exhibit all of the good coding practices mentioned in** [**http://sherrytowers.com/2012/12/14/good-programming-practices-in-any-language/**](http://sherrytowers.com/2012/12/14/good-programming-practices-in-any-language/)

**Plots should exhibit all of the good plotting practices mentioned in** [**http://sherrytowers.com/2013/01/04/good-practices-in-producing-plots/**](http://sherrytowers.com/2013/01/04/good-practices-in-producing-plots/)

**Please submit your files in a format hwk8\_<last name>.xxx where xxx is the format of the document (R, doc, tex, pdf, bib, etc)**

**Question 1)**

The project groups:

Crime and student performance

   Rick

   Bechir

   Cesar

State alcohol laws and DUI fatalities

   Karen

   Juan

Bullying and academic achievement

   Mugdha

   Caleb

   Josean

**a)** From now until the end of the semester, each project group must continue to schedule a regular weekly meeting with me to consult on their project. Based on the consultations, project groups will complete the project write-up, with all sections of the paper completed.

In your homework submission, indicate the word count limit of the Abstract and manuscript allowed by the selected journal, and provide an estimate of the word count of the Abstract and main body of your manuscript; **ensure that your word counts are within the guideline of the journal.**

b) project groups are to prepare a 30 minute in-class presentation on their work, to take place the week of April 23rd. Comments that were made on the first presentation earlier in the semester should be taken to heart, and rectified in this presentation (for example, if it was pointed out that your presentation had too much text, and not enough graphics, include less text and more graphics… as another example, if it was pointed out that the earlier presentation did not include nice visual summaries of results, these need to be included in this presentation)

Presentations should include several motivating slides that thoroughly describe past work related to the analysis. The presentation also needs to contain slides that put the analysis in context of past analyses.

c) after each presentation there will be 10 minutes for questions. All students are required to ask at least one question after each presentation.

**Question 2)**

Each project group must write cover letter to the journal editor, describing the analysis, how it contributes to the published body of knowledge on the topic, and explaining why it is a good fit for your chosen journal.

Style tips on writing cover letters can be found in the module [http://sherrytowers.com/2014/09/02/how-to-write-a-good-scientific-paper/ - submitting](http://sherrytowers.com/2014/09/02/how-to-write-a-good-scientific-paper/#submitting)

**Question 3)**

Class publication project: Using TSA firearm detection data to estimate temporal changes in arming configuration in American firearm carry and storage habits.

Based on your readings in Question 3 of Homework #7, and the analysis in Question 2) of that homework, write the Abstract and Introduction of the paper that will be describing that analysis (I will write the Methods and Materials section, and summarize the results).

**In the Introduction, be sure to include at least one or two paragraphs motivating the topic (include citations to the references you uncovered in the previous homework, using latex and bibtex).**

Also include a paragraph that describes the objective of the analysis.

Ensure that the Abstract you write is less than 250 words long. Use a structured format for the Abstract

Background:

Objective:

Results:

Conclusions:

I will be cobbling together peoples’ submissions into an Abstract and Introduction for the paper.