Data Analysis Project: MAT 3312 Spring 21

Dataset

The data comes from ACHA-National College Health Assessment (NCHA) conducted at WSSU in 2015.

https://www.acha.org/NCHA/About_ACHA_NCHA/Overview/NCHA/About/About_NCHA.aspx?hkey=75eaa64f-e82c-4cfd-a19c-4e3f9bf126ee

The name of the data set is 'NCHA Dataset'.

Please be sure to schedule a one-on-one consultation with me to get guidance for your analyses if you need assistance. Have fun with this project and explore!

Possible Research Topics

Investigate and choose one of the following topics to be the focus of your research and analysis:

- An Investigation of Alcohol, Tobacco, and Drugs Consumption Among College Students
- An Investigation of Factors Affecting College Students Weight
- An Investigation of Physical and Mental Health Among College Students
- The Relationship Between Lifestyle Factors and Body Mass Index Among College Students
- Trends in Body Mass Index and Physical Fitness Among Male and Female College Students
- The Relationship Between Lifestyle Factors and Academic performance among College Students
- The Relationship Weight, Nutrition, and Exercise Among College Students
- An Investigation of Health Education and Lifestyle Behaviors Among College Students

Rubric

Written Report (12%) *Due: May 10th 11:59pm (double spaced) 80pts*

Include a cover page with the title of the research question, your name, class name, and date

Your report should consist of *4 sections*:

   I.   **Introduction**
- Background about the research problem **10pts**

- Statement about what the study evaluated **10pts**

    II. Methodology
- Table listing all the variables used in the analyses. The table should include the list of variables and the description of variables name **10pts**
- Describe what statistical analyses were performed **10pts**
- Describe why that particular analysis was chosen **10pts**

    III. Results
- Describe results and displayed using tables and figures **20pts**

    IV. Conclusion
- Short paragraph with overall conclusion of the data analysis projects. **10pts**
- State any future research questions

Presentation (8%): Due: May:12ᵗʰ 11am-1:45pm (15-20min long) 60pts

- Include a slide with the title of the research question, name, class name, and date **4pts**
- Provide an outline of the presentation components **5pts**
- Provide a clear background about the research problem **6pts**
- Included a slide with a table of the variables used in the study to conduct the data analysis **5pts**
- A slide with statistical Methodology **10pts**
- Results section (result section can include tables, figure, and models from SAS output properly interpreted in the context of public health) **20pts**
- Conclusion section **10pts**

Analyses to consider in your project

- Descriptive Statistics (mean, standard deviation, mode, median, range, Quartiles IQR, count and percentage chapter 2 and chapter 10)
- Graphical analyses (bar charts, histograms , and scatter plots; chapter 2 and chapter 11)
- Two sample t-test (chapter 8)
- Categorical data analysis (contingency table and chi-square test chapter 10)
- Regression analysis (simple linear regression modeling (t-test and F-test, R-square results) and multiple linear regression modeling; Chapter 11)