Propose a project that uses a large, publicly accessible dataset. Explain your motivation for tackling this problem, discuss the data source(s) you are using, and explain the analysis you are performing.

At a minimum, you will need to do enough exploratory data analysis to convince someone that the project is viable and generate two interesting non-trivial plots supporting this.

*The most impressive applicants have even finished a "rough draft" of their projects and have derived non-obvious meaningful conclusions from their data.* Explain the plots and give url links to them. For guidance on how to choose a project, check out [this blog post](http://blog.thedataincubator.com/2017/01/how-employers-judge-data-science-projects/).

<https://data.world/afterschool/teen-stress-mental-health-poll-on-after-school/workspace/file?filename=mental_health_poll_updated.csv>

<https://data.world/azel/gun-deaths-in-america>

Topic/Research Question: Why are so many our youths dying by suicide?

Popular media plays an important role in shaping how society perceives teen mental health and suicide. According to American Psychiatric Association (2018), suicide rates are on a concerning upward trend. It is also the third leading cause of death for individuals between 10 and 14 years of age and the second leading cause for individuals between 15 and 34.

This is such an alarming phenomenon and I would argue that we must first determine what are the factors that are contributing to this effect, the prevalence and types of method used, and what demographics.

[After School,](https://data.world/afterschool/teen-stress-mental-health-poll-on-after-school/workspace/file?filename=mental_health_poll_updated.csv) a teen-focused social network, collected data on factors that may contribute to their stress and mental health. The data consist of N = 35,878 teens who participated in this poll from various regions and cities within the United States. The poll captures four essential questions regarding participants reported mental health and stress. These questions included, “What stresses you out the most?” (*M =2.41, SD =1.37; min = 1, max= 4)* “What are you most likely to do when you’re stressed?” (*M =3.63, SD = 1.60; min = 1, max= 6)*, “What resources you use to help?” (*M =1.80, SD= .87.; min = 1, max= 4)*, and finally “ What stresses you out the most?” (*M =4.18, SD = 1.57; min = 1, max= 6)*. Furthermore, a two-way association between how often participants reported being stress on a 4- item ordinal scale and the factors that induce the stress, results show that 21% of this sample are stressed “*All the time”* and because of *“College”*, a 6-item scale . [Lipschitz (1990)](https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1943-278X.1995.tb00400.x) states suicide among college students are unique to the stresses of academic life. It is important to highlight that depression is the most prevalent diagnosis among young people who commit or attempt suicide and the best predictor of current suicidal behavior or ideation among college students [(Silverman et al., 1977).](https://www.semanticscholar.org/paper/The-Big-Ten-Student-Suicide-Study%3A-a-10-year-study-Silverman-Meyer/59bdaadd37e821f7af96970f721568639c5b61f8) Moreover, it is important to highlight that about 22% of these teens are engaging in risky behaviors such as drugs and alcohol most of the time.

The dataset on [Gun deaths in America](HYPERLINK%20%22https:/data.world/azel/gun-deaths-in-america%22%20https:/data.world/azel/gun-deaths-in-america) is used to explain how stressful factors such as college as well as continued drug and alcohol use may result to the suicide with the use of a gun. I conducted a regression model to demonstrate the effect of an individual’s level of education and their age when holding suicide constant. The results demonstrate that suicide with the sue of a gun is most prevalent amongst individuals that are less educated and a bit older. The beta coefficient shows that this effect if significant at *b = -1.52 and p<.05* and at alpha 0.05. It is also important to note that 86% of men are more likely to commit suicide using a gun in comparison to women.