Narrative Design

Soha Sultana Section AC, Group 11

3) Factors: Looking at how does Education Level, and Employment Status contribute to Tobacco Use

This visualization will focus on finding what factors play to tobacco use and finding the relationship between certain factors(education level and employment status), and how much do they correlate with tobacco use

Data Needed:

- Education level: "< 12th Grade", "12th Grade", "> 12th Grade"
- Tobacco use: "Cigarette Use (Adults)", "Smokeless Tobacco Use (Adults)", "E-Cigarette Use (Adults)" • Rate of occurrence for each category as it pertains to education level
- Employment Status: "Employment", "Labor Force", "Unemployment"

Story Intention and Key Takeaways

The key takeaways for this part of the project is to find out What are the main factors that are causing smoking levels, and do these factors intersect with one another. The potential factors are education levels, employment status, and the labor force. Each of these potential factors will be compared with the smoking levels and looking at their correlation. This will give a better understanding if these potential factors have a relationship with smoking levels. After a correlation is found, different conclusions can be drawn to support the idea that these factors do increase smoking levels. With this data, you will find what is the biggest factor that leads to these smoking levels, and based off that, can provide solutions and how to mitigate the risk and issue. This data can help us understand tobacco use patterns and if certain education levels and jobs have an impact on how much tobacco use an individual has.

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Visualization Plan

To show which of these is a potential factor, there needs to be a comparison of smoking rates and the potential factors.
- One way to do this is to potentially create a pie chart showing the percentage of each factor to give a comparison on how much each factor plays in the role of smoking rates
- To plot the pie chart in ggplot:
- Filter down each of the potential factor's columns and compare that to the smoking level column. Which of the factors is closest to the smoking level is the biggest factor

Another extension to this adding tabs for each of the factors, giving more specific information and the exact numbers on how much each factor affects tobacco use
- This can be done using Shiny and looking at tabs, and adding a tab section to each factor going more in depth what the factor is, how much it affects tobacco usage and how it can be mitigated

Visualization Plan

Main Causes of Tobacco Use
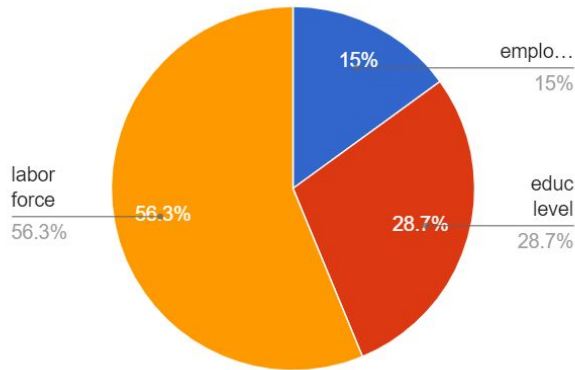
This is a basic idea of what my visual will look like, I used a pie chart that shows the proportion of each factor to find which is the biggest causation. I will also try to add an interactive aspect where if you click or hover over one of the pie blocks, you are able to learn more information about it, such as what the cause is and how it affects tobacco use

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