Personal Report in Visualization Group Project

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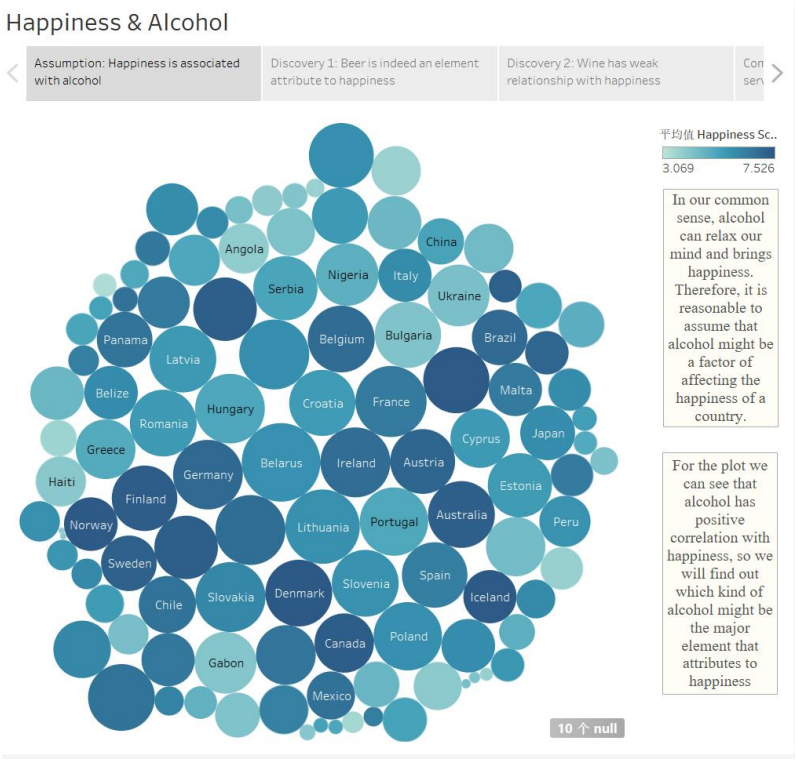
In this observation, I used bubble plot, scatter plot, line chart and other types of classical plots to prove my conclusion on the correlation between alcohol consumption and happiness score.

For providing the assumption, I used a bubble plot to reveal the correlation between the alcohol and happiness as follow:

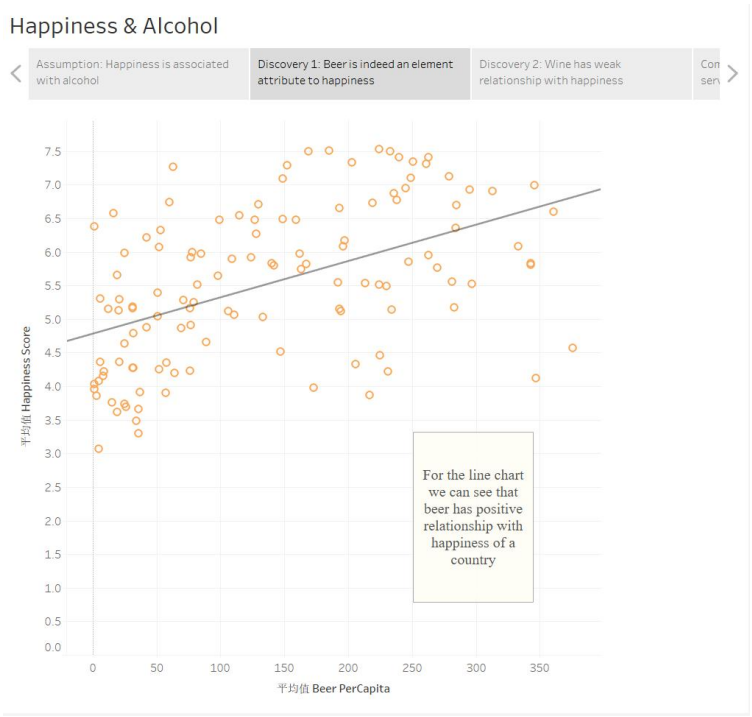


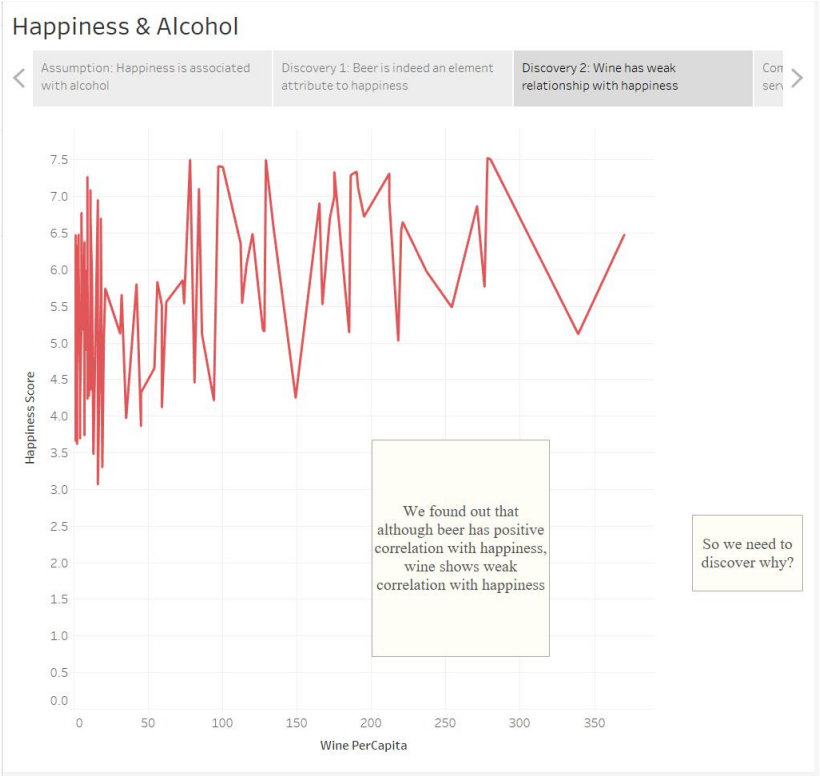
How to read:

The color of this plot represents the degree of ***Happiness Score*** of a country while the size of the circle means the alcohol consumption situation of this country. Also, the text at the side elaborates the idea of discovering the relationship between alcohol and happiness.

Conclusion:

From this plot we can obviously see that ***Alcohol Consumption*** indeed has the positive correlation with ***Happiness Score*** of a country. However, we can acquire from the plot that their correlation is not strong enough. Thus, we can assume that happiness might only associated with some specific type of alcohol. Therefore, I made a further observation on it.





How to read:

To demonstrate the correlation between ***Beer Consumption*** and ***Happiness Score***, I used a scatter plot with a trend line to reveal it. The ***X axis*** represents the ***Beer Consumption*** while ***Y axis*** represents the ***Happiness Score***.

With the second plot, I used a line chart to reveal the correlation between the ***Wine Consumption*** and ***Happiness Score***. The ***X axis*** represents the ***Wine Consumption*** while the ***Y axis*** represents the ***Happiness Score***.

Conclusion:

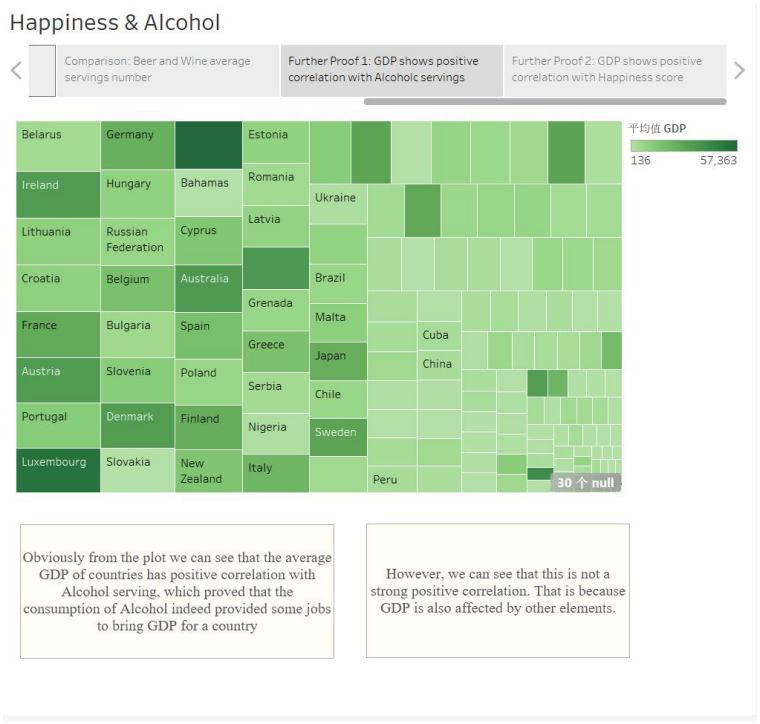
Acquire from these two plots, we can conclude that ***Happiness Score*** indeed affected by the ***Beer Consumption***. However, it might not be associated with the ***Wine Consumption***. Thus, I will explore it in the next few plots.

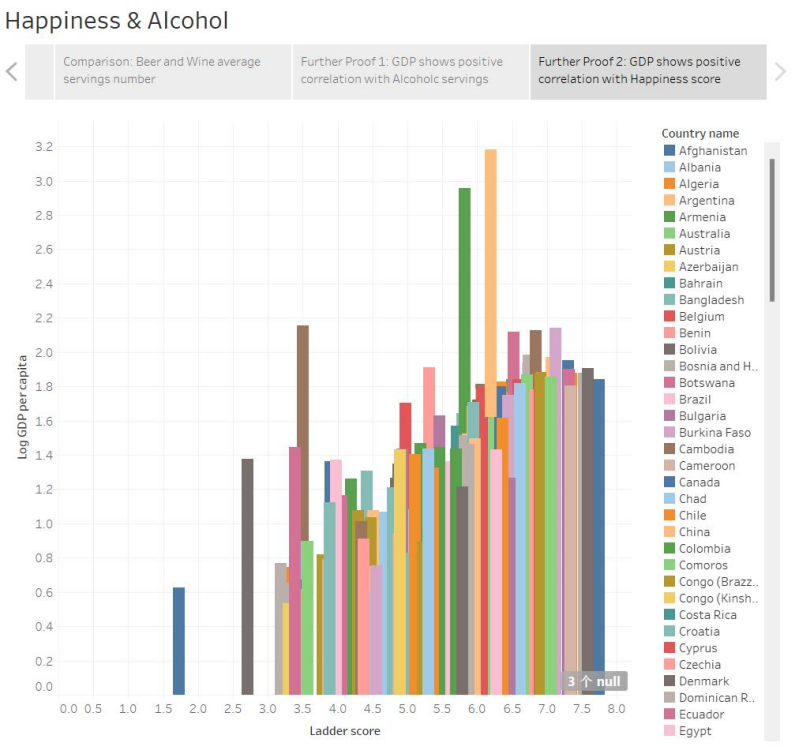
How to read:

In this dashboard, I combined the form of ***Wine Average Servings*** and ***Beer Average Servings*** together for a more directly demonstration. Plot on the right side represents the ***Average Servings of Beer*** while the left one represents the ***Wines'***. The color and the number both represent the average value of corresponding alcohol servings.

Conclusion:

From the dashboard we can see that the ***Average Servings of Beer*** is way higher than the ***Average Servings in Wine***. We can make a brief conclusion that due to the ***Consumption on Beer*** is much higher, which might lead to more production and more jobs, that affect the ***GDP*** of a country. Finally, affecting the happiness of the residents.





How to read:

I used two plots to prove my points. The first one shows the correlation between ***GDP*** and ***Alcohol Consumption*** while the second one shows correlation between the ***Happiness Score*** and ***GDP***.

Conclusion:

From the plot we can conclude that alcohol indeed affect the ***GDP*** of a country.

Also, happiness score is associated with ***GDP*** of a country.

Summary:

From the plots I made in this observation, we can make a final conclusion that the alcohol is indeed a factor that positively increase the happiness of a country. More precisely, we can say that beer is the major factor to increase the happiness of a country. As we can found from the analysis that it generates the GDP of a country by accelerate the industry of production, which might lead to more jobs in country for residents.

In this group project, I have realized that visualization is not only a job to draw some graphics, but also a mission to optimize the plots for audience to read while use the correct visualization tools to simplify the demonstration of data sets.