**World Happiness and Suicide Rates**

In this document, I will be analyzing the data sets from the World Happiness Report and the Suicide Rates Worldwide organized by the World Health Organization. Both datasets were downloaded from Kaggle. I used SQL to clean data from the Suicide excel sheet and then used SQL to join and manipulate the data. Tables were then transferred to Excel for visualizations.

The World Happiness report tries to score each country based on factors such as Economy, Family, Freedom, Trust, Etc. In this document we blindly use the happiness score, and we do not evaluate what makes this score possible. We compare the happiness report to the probability of suicide report.

I was initially interested in this project because I wanted to see how I could connect different types of data and formulate something interesting. Below you will see screenshots from SQL and Excel showing what was found.

The Happiness data is broken up into different data sets for the years 2015 to 2019. Here I joined the datasets to show their score by year.

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Using simple formulas, I added the sum and average columns in excel to better understand which countries consistently had the best happiness scores over the course of 2015-2019. The following tables show the top and bottom 10 countries filtered by the Average Happiness Score. A screenshot of a computer

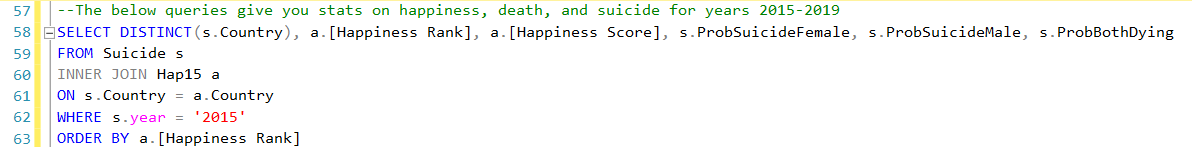
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A picture containing chart

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As we can see the happiness score is from 1 – 157. Overall, the happiness scores do not change much from year to year. If you have a good score for one year, you are more likely to have a good score for the other 4 years as well. The same applies for the average and bad happiness scores.

I joined the Suicide and Happiness datasets for each year to better understand the correlation between the two. Below is the query for the year 2015.



Transferring this query to excel, I filtered by the probability of a female committing suicide from least to greatest. The picture below shows 2015’s top ten countries with the lowest probability for suicide. The country with the least female suicides was ranked 82nd on the world happiness report, and the country with the most female suicides was ranked 97th. For 2015 the happiest country was Switzerland who ranked 124th on the list of lowest female suicides and the least happy country was Burundi who ranked 53rd. Out of our top ten happiest countries on average, Iceland holds the lowest suicide rate for females at 5.9% which ranks Iceland at number 96th for lowest probability of female suicides. Out of the 10 least happy countries, Afghanistan holds the lowest suicide rate for females at 3.6% which ranks Afghanistan at number 13 for lowest female suicides. A similar result is achieved when filtering by male suicides from 2015 to 2019.

Table

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The suicide probability data is from 2000-2019, so we have a larger range to experiment with. I analyzed the top ten happiest countries’ average probability of dying and suicide for both males and females. Throughout the span of 19 years, these countries have lowered their probability of death. In the year 2000, their average probability of death was 14.61%. This average probability of death decreased consistently each year, and in 2019 their probability of death was an average of 9.29%. An amazing result for the world’s happiest countries. On the other hand, the average probability of suicides for both sexes did not mimic a controlled decrease. The average probability in 2000 for suicide was 14.89% and 12.6% in 2019. Using the excel slicer, you can see the probability of suicides fluctuate in a decreasing pattern.

Table

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Graphical user interface, table

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When looking through the same data for the ten least happy countries, the average probability of death starts at 29.39% and ends at 24.02% in 2019. This is a slow and consistent decline throughout the 19 years. The average probability of suicide in 2000 was 7.52% and 5.38% in 2019. The average probability of suicide was equal in 2012 and 2013 showing no decline at 5.68%, however there was a decline in all other years.

For the next steps I would recommend comparing the top ten most and least happiest countries on population, economic status, and education levels. This will help us better understand why we are seeing low suicide rates for the least happy countries and high suicide rates for the happiest countries.