Ben Nguyen

Professor Muzny

DS2001

1 December 2020

<div align="center">A Look into World Happiness</div>

As we wind down the last weeks of 2020, it's safe to say that this has been a year like no other. As the coronavirus pandemic plays out, the world and the life we knew came to a halt, and even when the world eventually goes back to the way it was, it is clear that it will never be the same again. Mental health concerns throughout the pandemic will cause the World Happiness Report to give lower scores for 2020 compared to other years. Even with this in mind, 2020 is not complete yet, and so the pandemic's effect on people is not fully recognized. The scores from the 2019 World Happiness Report will be used instead in this report in order to gauge the countries's overall happiness.

There are 195 officially recognized countries globally; however, there are only 156 countries in the data presented. Some of the missing countries included Andorra and Liechtenstein. These countries are tiny, so it may be challenging to collect accurate data. Another notable country missing from this table was North Korea. This omission comes as no surprise as North Korea is one of the most repressive and isolated countries globally. The government doesn't want people to find out about their actual numbers.

Except for New Zealand and Canada, all of the top 10 happiest countries are in Europe. The top four countries all come from the northern part of the continent: Finland, Denmark, Norway, and Iceland. Sweden, the only Scandanavian country not in the top 4, ranks 7th overall. Between 11th and 20th, the countries are from more varied locations such as the United States,

Israel, and Australia, to name a few. The bottom 20 in this table are from more varied parts of the world. Most come from Sub-Saharan Africa or the Middle East, but Haiti is also included in this list and is the only country in the bottom 20 from the Western Hemisphere.

After finding the top and bottom 20 countries within this dataset, I thought it would be best to determine how different aspects in a country's overall score compare to one another in those top and bottom countries. I laid out six possible comparisons I found interesting and examined their correlation to each other within the top 20, bottom 20, and the dataset as a whole.

Throughout plotting these comparisons, I found that the top countries tend to positively correlate between the two factors while the bottom countries followed a consistent pattern of having no correlation. The overall charts were more varied results as some charts were showing positive correlations while others showed no correlation. The charts did not provide a complete picture of how one factor compared with every other one. If I was to do this, it would be too time-consuming and would fill my Jupyter notebook with too many unnecessary graphs. I also decided to find each column's average value to see which countries were most like the average.

The average overall score of the countries was 5.407. This makes the average country in this DataFrame most like the Dominican Republic and Bosnia and Herzegovina at ranks 77 and 78, respectively.

Social support plays the most prominent part in determining a country's overall score, with an average score of 1.209. According to John F. Helliwell from the University of British Columbia, social support is measured by asking, "If you were in trouble, do you have relatives or friends you can count on to help you whenever you need them, or not?" Bolivia is the world's center mark for social support as it also has a score of 1.209 in this category.

The perceptions of corruption contributed the least to the total score, with an average value of only 0.111. The perception of corruption is calculated as "the average of binary answers to two GWP questions: 'Is corruption widespread throughout the government or not?' and 'Is corruption widespread within businesses or not'" (Helliwell)? Haiti was most similar to the world average, with a corruption score of 0.1. However, this cannot be fully believed as Haiti is also one of the unhappiest countries in the world, and the people there may or may not be forced to say their government is not corrupt.

Considering how GDP per capita is the second largest factor in a country's score, it is surprising that generosity is so low. Generosity took into account how much money people donated to charity based on GDP per capita. By this logic, the countries with a larger GDP per capita should also donate more.

Overall in this pursuit of happiness, northern European countries tend to be the happiest. Why are they like this? According to Zamira Rahim from Time, "the answer comes down to neighborly support between citizens and state support programs for those in need. People want to feel secure, and they also benefit from having a community that they can count on — an environment the Scandinavian countries do better than most in creating." Scandinavian countries are incredibly adept at creating a cohesive, happy country and can be used as a model for other countries to follow.

The world became a much different place this year. The pandemic turned life upside down and is not going away anytime soon. The year 2020 will forever be one for the history books. Until we understand its full impact, let's look back at the previous year and see how happy people were before COVID-19 became widespread. We might not see those numbers again for quite some time. Perhaps in 2021, we can see just how unhappy people became.

Works Cited:

Helliwell, John F., et al. "Changing World Happiness." Worldhappiness.Report, 20 Mar. 2019,

worldhappiness.report/ed/2019/changing-world-happiness/. Accessed 29 Nov. 2020.

Rahim, Zamira. "Norway Is Happiest Country in the World. What's the Secret?" Time.com,

Time, 2017,

time.com/collection/guide-to-happiness/4706590/scandinavia-world-happiness-report-nordics/.

Accessed 29 Nov. 2020.