

# Which Country is the Happiest?

INFO4602 - Information Visualization Final

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## Abstract:

Happiness is something that humans value world wide. People strive to be happy, and healthy. But what countries are the most happy and why? To investigate this question I retrieved the 2019 world happiness data from Kaggle. This dataset was created from the Gallup World Poll which creates the happiness survey yearly to track world happiness.

I found the biggest factor in predicting a countries happiness is their GDP. Countries in Scandinavia are typically the happiest, with Finland being the number 1 happiest country.

## Introduction:

Everyone strives to be happy, so which countries are the happiest and why? I set out to find what factors into a countries overall happiness such as GDP, generosity, perception of corruption, and freedom to make life choices.

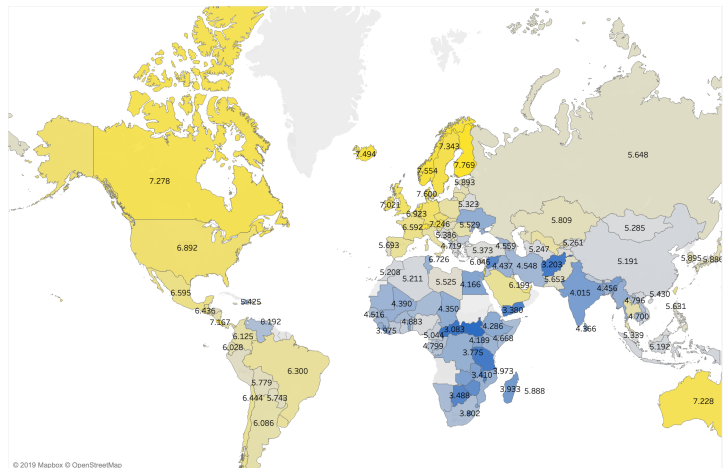
## Related Works:

1. <https://www.newsweek.com/whats-worlds-happiest-country-does-it-matter-324448>
2. <https://www.cnn.com/travel/article/worlds-happiest-countries-united-nations-2019/index.html>
3. <https://econreview.berkeley.edu/beyond-gdp-economics-and-happiness/>
4. <https://www.economist.com/graphic-detail/2019/03/21/economic-growth-does-not-guarantee-rising-happiness>
5. <https://ourworldindata.org/happiness-and-life-satisfaction>
6. <https://www.weforum.org/agenda/2018/03/these-are-the-happiest-countries-in-the-world/>
7. <https://www.health.harvard.edu/healthbeat/giving-thanks-can-make-you-happier>
8. <https://news.gallup.com/opinion/gallup/245192/generous-countries-world.aspx>

There has been some prior research done into what the worlds happiest country is and what factors into the happiness, but most are working with data that was aggregated before my 2019 dataset. Most found the Scandinavian countries were the happiest and best in support and happiness. They also found that the superpowers were less happy than smaller countries. Another finding of related works is that GDP is one of the greatest factors into a countries's happiness score.

## Detailed Description of Design Elements:

I created 4 different visualizations that can all interact with each other.



The first one is a heat map of the world with the color associated to the countries happiness score with the text over the country referring to the score. This allows the user to gain an overall view of world happiness.

The next graph looks at a country's perception of corruption and compares it to the freedom to make life choices, with color mapped on top of it. That graph is meant to allow the user to gain an overview of which countries might be the happiest due to freedom and corruption.

The third graph compared GDP and Happiness Score. This one is the main hitter graph of the project. The size of the bubble is also associated with life expectancy. This graph is meant to allow the user to gain insight into how GDP related to happiness and life expectancy, and allow the user to compare it to another country.

The last graph looks at generosity and score. This graph is meant for users to understand how a countries generosity may factor into their happiness score as well as using this one as a filter on the other graphs to gain more insight.

They all work together with a filter so you can learn about what factors into each countries happiness score.

## Discussion:

So which countries are the happiest? Finland, Denmark, Norway, Iceland, and the Netherlands are the top 5. But how does happiness relate to the other metrics I was looking at. Generosity seems to be the outlier in terms of predicting happiness. Typically, the more generous a country is does not predict whether the country is happy or not, if we want to predict that we will have to look at GDP.

After creating my visualizations I found that GDP was the greatest predictor to a countries happiness as well as their life expectancy.

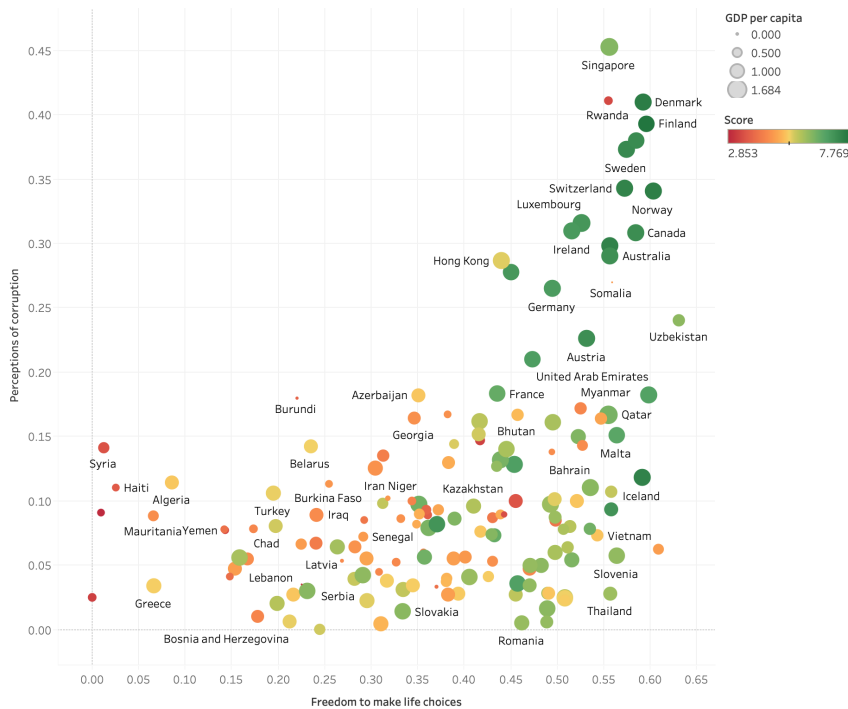


perception of corruption is high and freedom to make life choices is high, but their happiness level is low.

So as you can see, each graph allows us to see those 5 Scandinavian countries coming out on top, they are also some of the highest in GDP. So if a country has a higher GDP they're more likely to have a happier population.

From the graph above, you can see that countries that were less happy typically had a shorter life expectancy, as well as a lower GDP. This GDP v. Happiness is the most correlated out of all the factors. So if a country wants to be more happy, typically, they should try to increase their GDP.

Another interesting thing I observed was the relation of the perception of corruption, and freedom to make life choices, and a countries happiness score.



As you can see countries that typically had more freedom were typically more happy. Rwanda is an outlier whose