

Happiness: Rating Each Country's Happiness

11.November.2020

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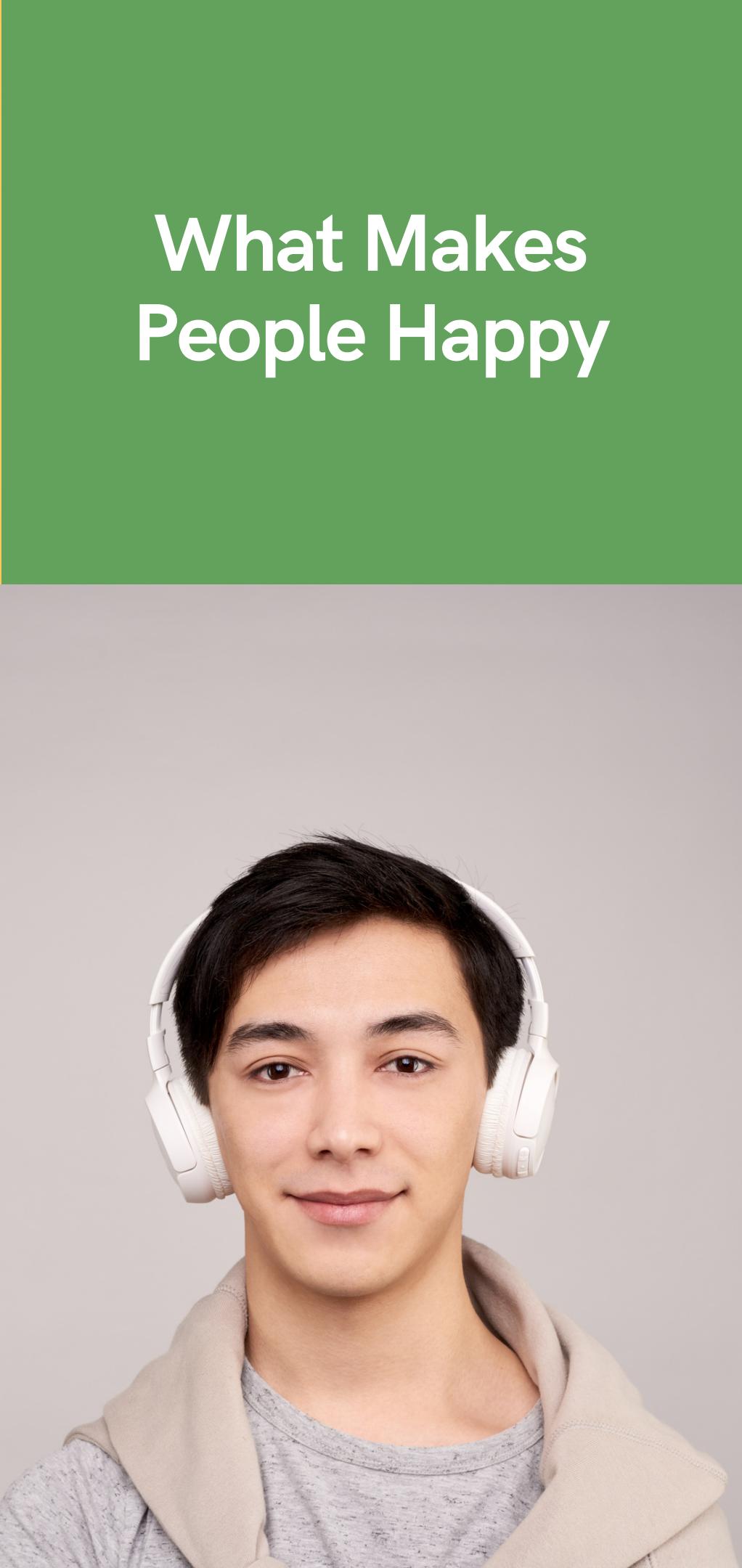
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Which Country
Is The Happiest



What Makes
People Happy

Transformation of Data

Extract

Open PGAdmin and create a table schema to hold the data from the csv files, each file in its own table. You then write a query to join all the tables together by country name

Transform

Now that all the data are in one table, you need to make sure that the data are clean. You load the file into a Jupyter notebook and see that there are a lot of NaN values.

	urbanization_rate_country	urbanization_rate	suicide_rate	meat_consumption	gdp_per_capita	fertility	ladder_score	logged_gdp_per_capita	social_sup
0	Monaco	100.0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
1	Nauru	100.0	NaN	NaN	9073.0	NaN	NaN	NaN	NaN
2	Singapore	100.0	7.9	71.1	105689.0	1.1	6.3771	11.395521	0.910
3	Anguilla	100.0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
4	Bermuda	100.0	NaN	NaN	NaN	1.6	NaN	NaN	NaN
...
242	NaN	NaN	NaN	NaN	NaN	NaN	4.7506	7.321815	0.690
243	NaN	NaN	NaN	NaN	NaN	NaN	6.3252	9.204430	0.820
244	NaN	NaN	NaN	NaN	NaN	NaN	4.3110	6.694256	0.670
245	NaN	NaN	NaN	NaN	NaN	NaN	4.3081	9.162674	0.770
246	NaN	NaN	NaN	NaN	NaN	NaN	6.4554	10.775685	0.890

Transform

Start by removing all rows with NaN values. You then see that some of the column titles are confusing, so you rename ladder_score to be happiness_score, and urbanization_rate_country to be just Country.

Finally, you decide that some of the scores are not easy to read, so you round them all to 2 decimal points.

Transformation of Data

Load

We load all this new data into a database so you can easily use it again. Since it is a list of scores grouped just by country, it makes sense to load it into a non-relational database like MongoDB.

Analysis

Through Jupyter Notebooks we analyze the data utilizing bar charts. We selected the top 20 happiest countries and also the bottom 20 based on ladder score. We then analyzed them through each lifestyle area comparing the countries from there.

Rating Countries Happiness

Happiness Score

A countries rate of happiness is determined by it's happiness score. The happiness score is viewed as a ladder. Countries that are happier are at the top of the ladder and goes down the ladder from there.



Next Steps

By looking to see these lifestyles and the ladder score, we can make an assumption of the lifestyle choices we make to become happier.



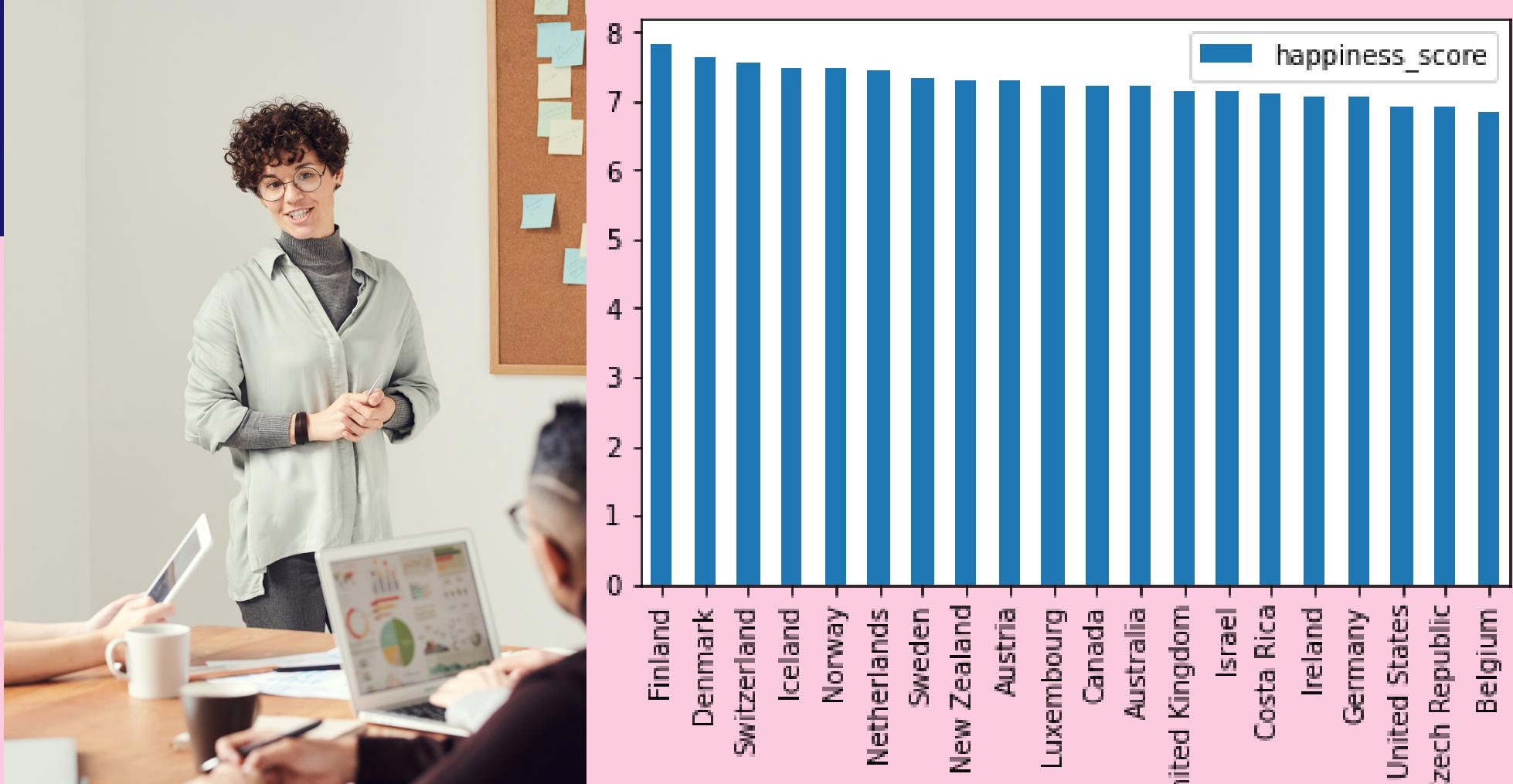
What Are We Looking At

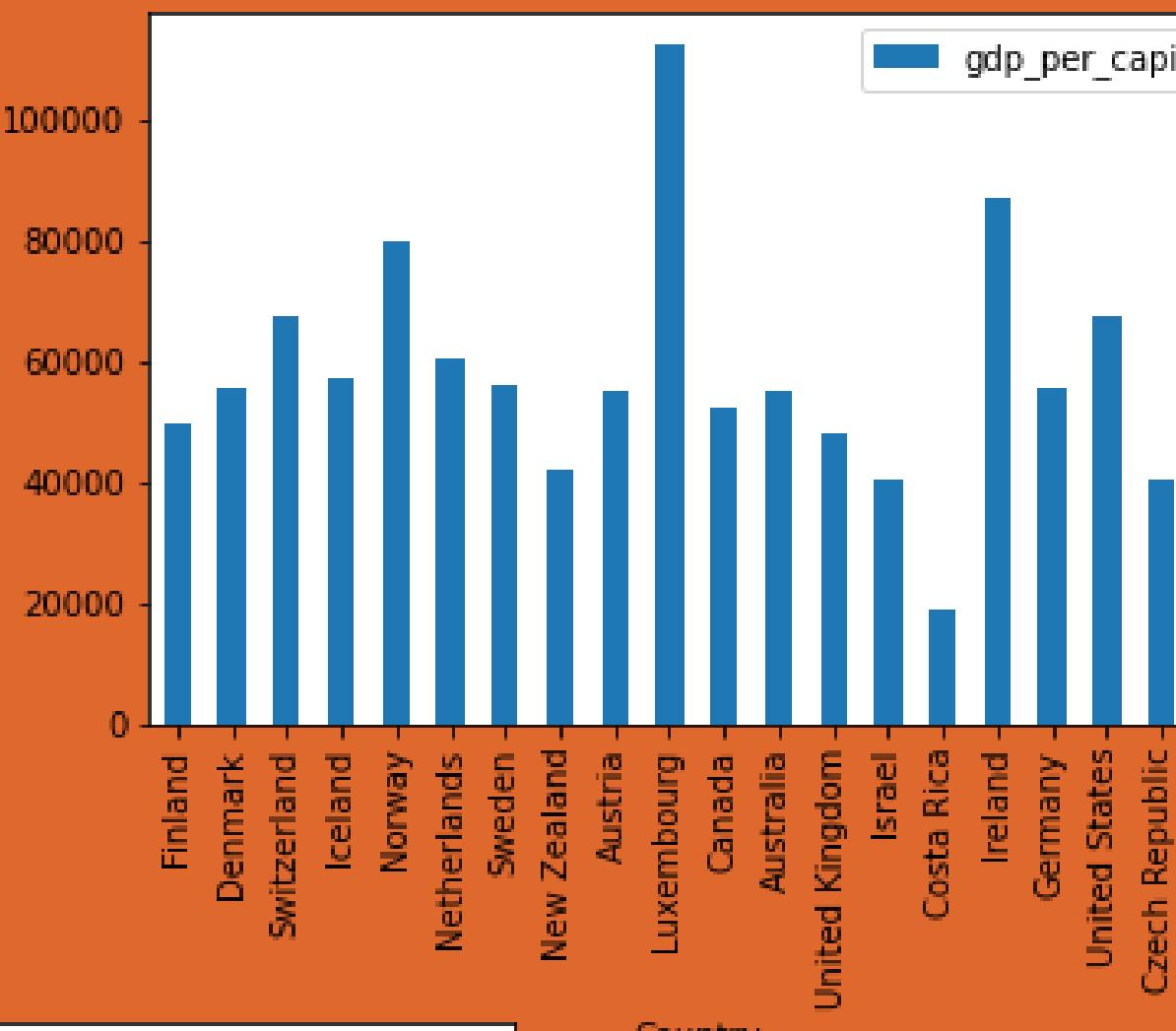
In this study we are looking at how different parts of lifestyle relate to the ladder score of the countries. We will be looking at both the high end of the happiness ladder and also the low end.

Happiness Score

Looking at the ladder score of the countries only. The top country of happiness is Finland.

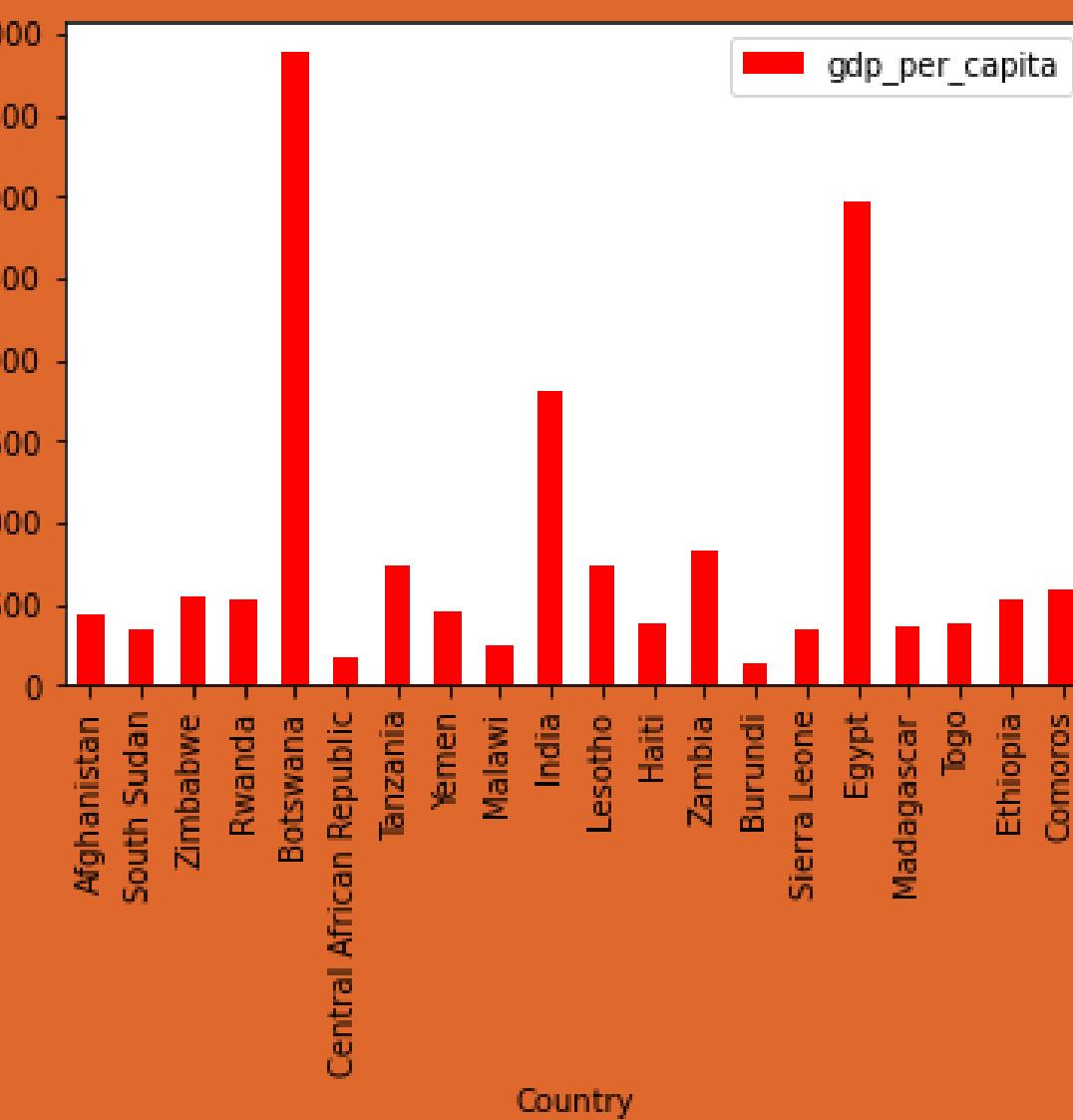
On the lower end of the ladder is Afghanistan.





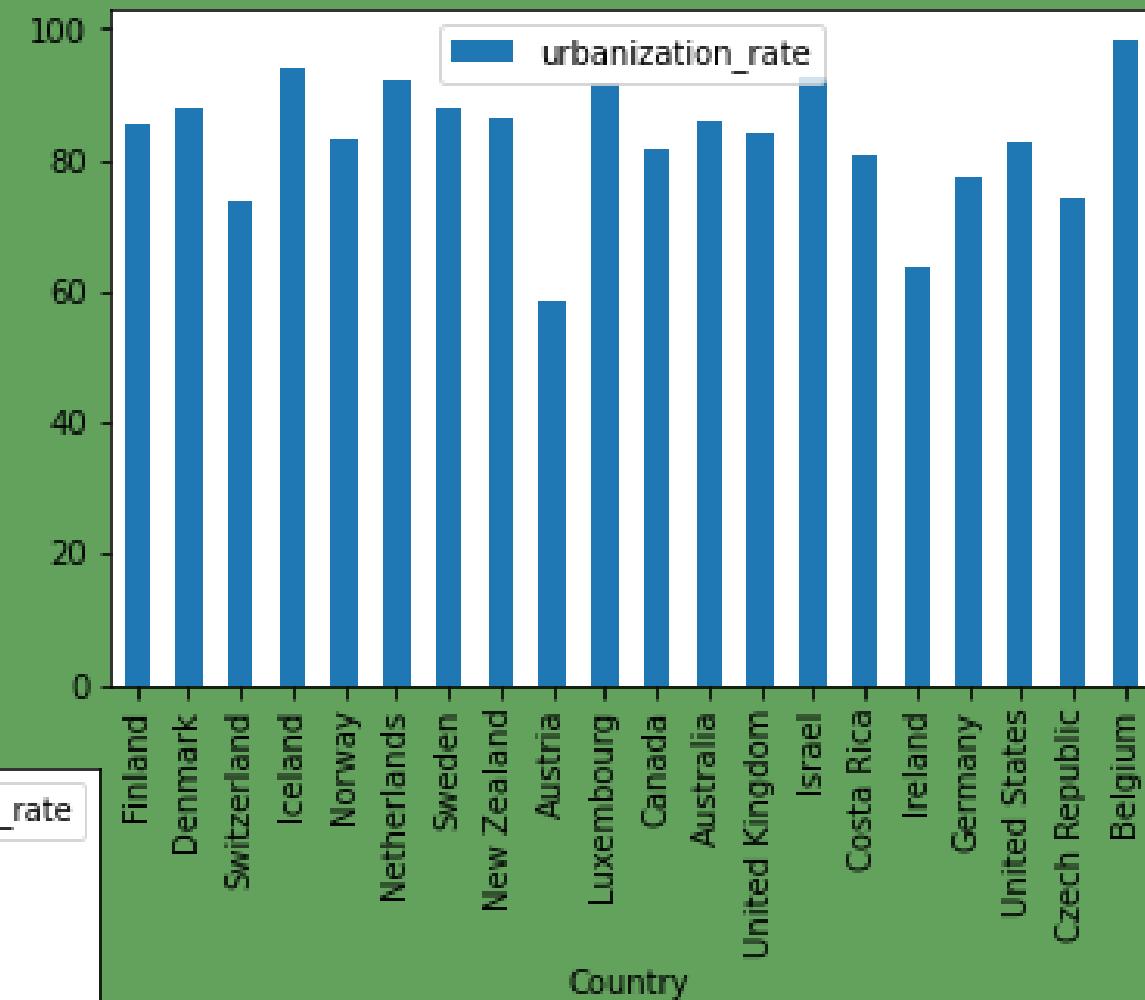
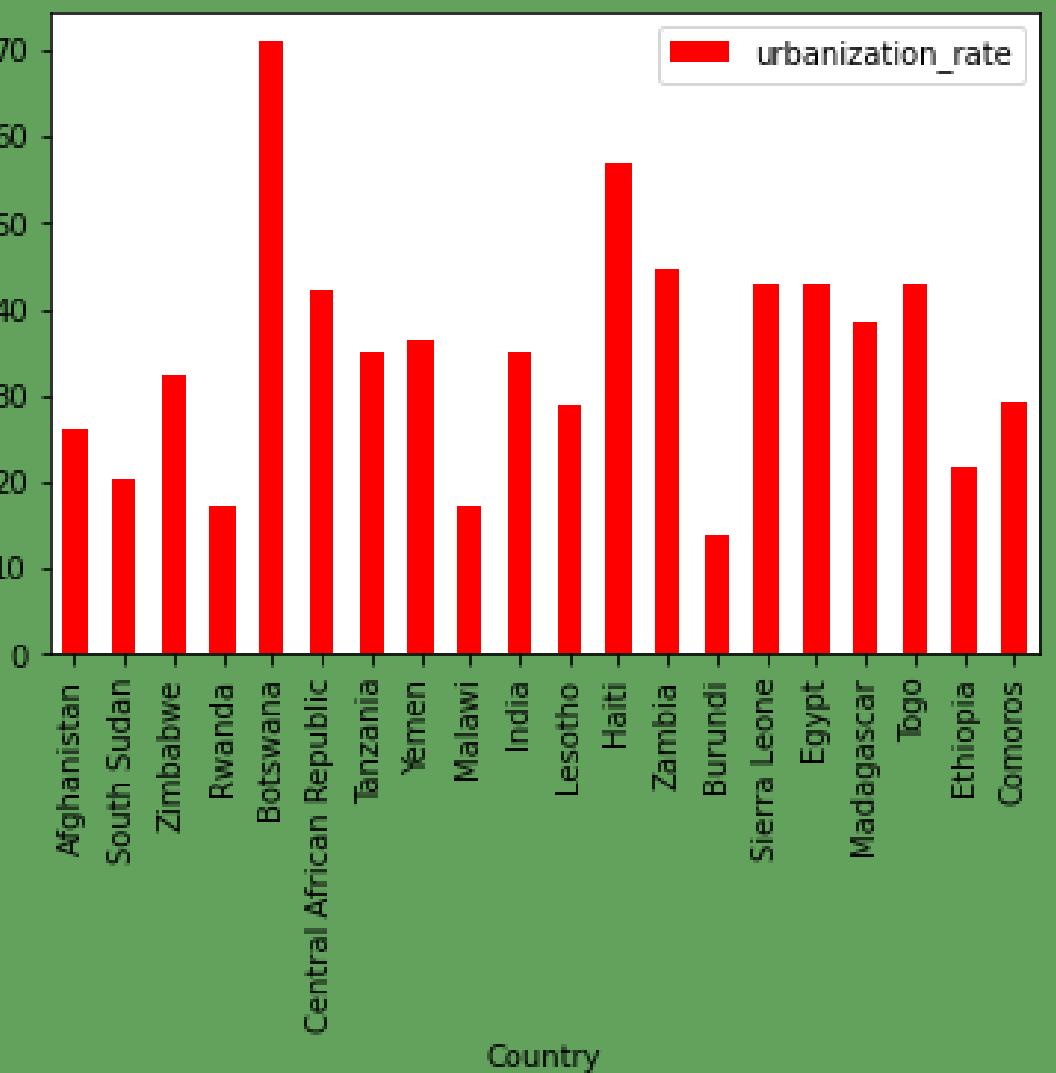
GDP Per Capita

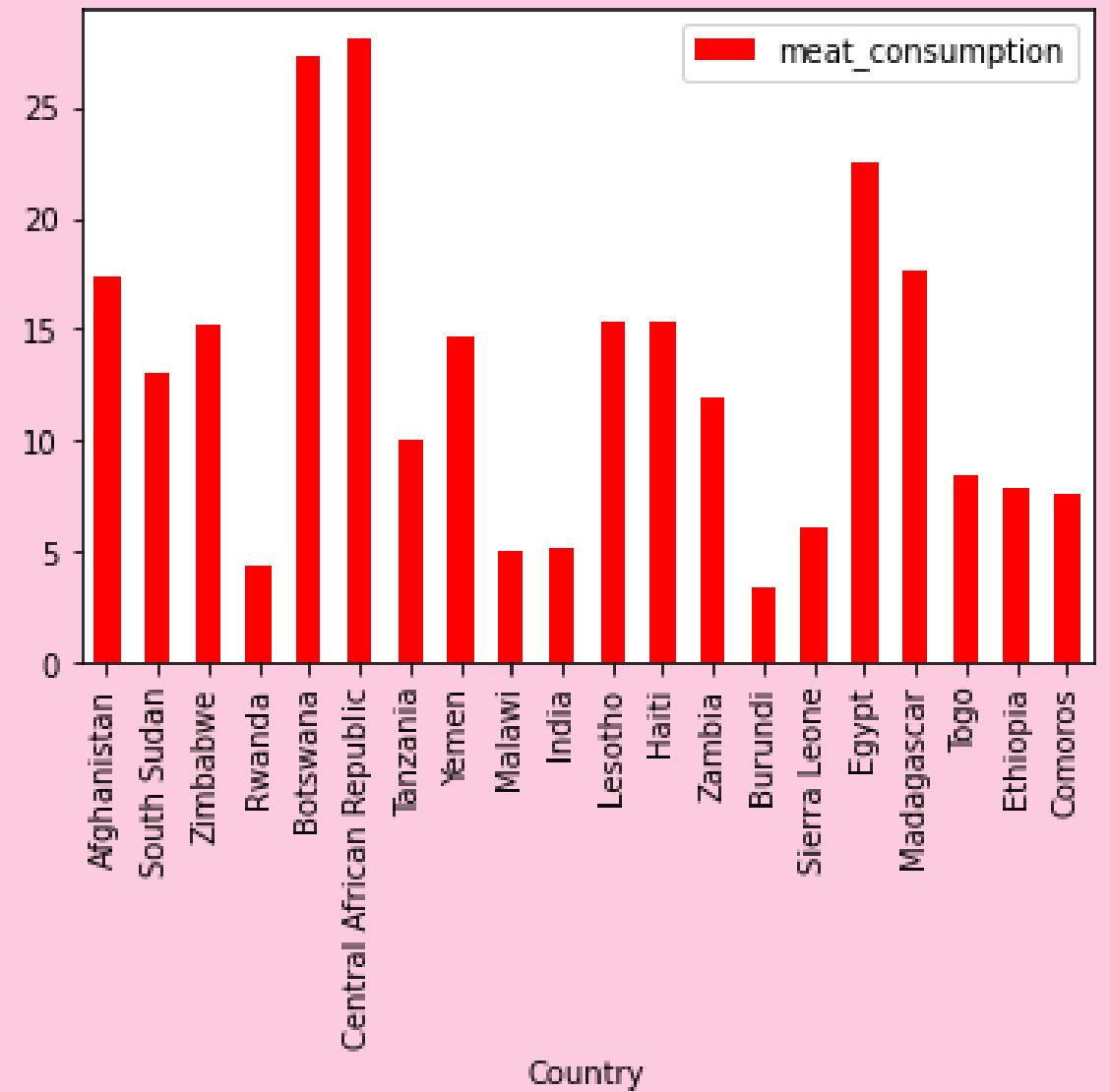
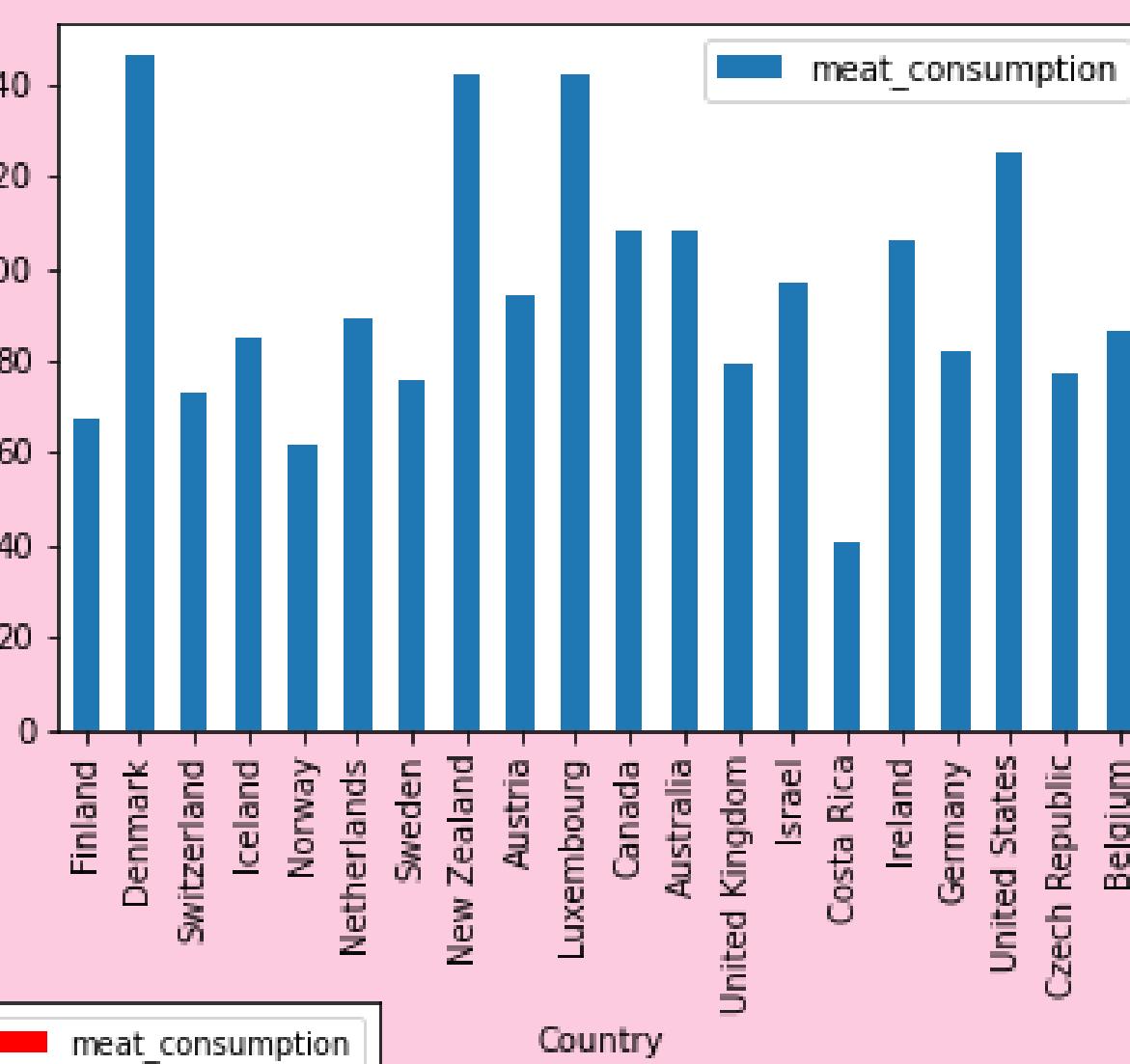
The GDP per capita is looking at the population of each country and the happiness based on the population. These graphs show that the top 20 countries in happiness have a higher GDP-per capita than the lowest 20.



Urbanization Rate

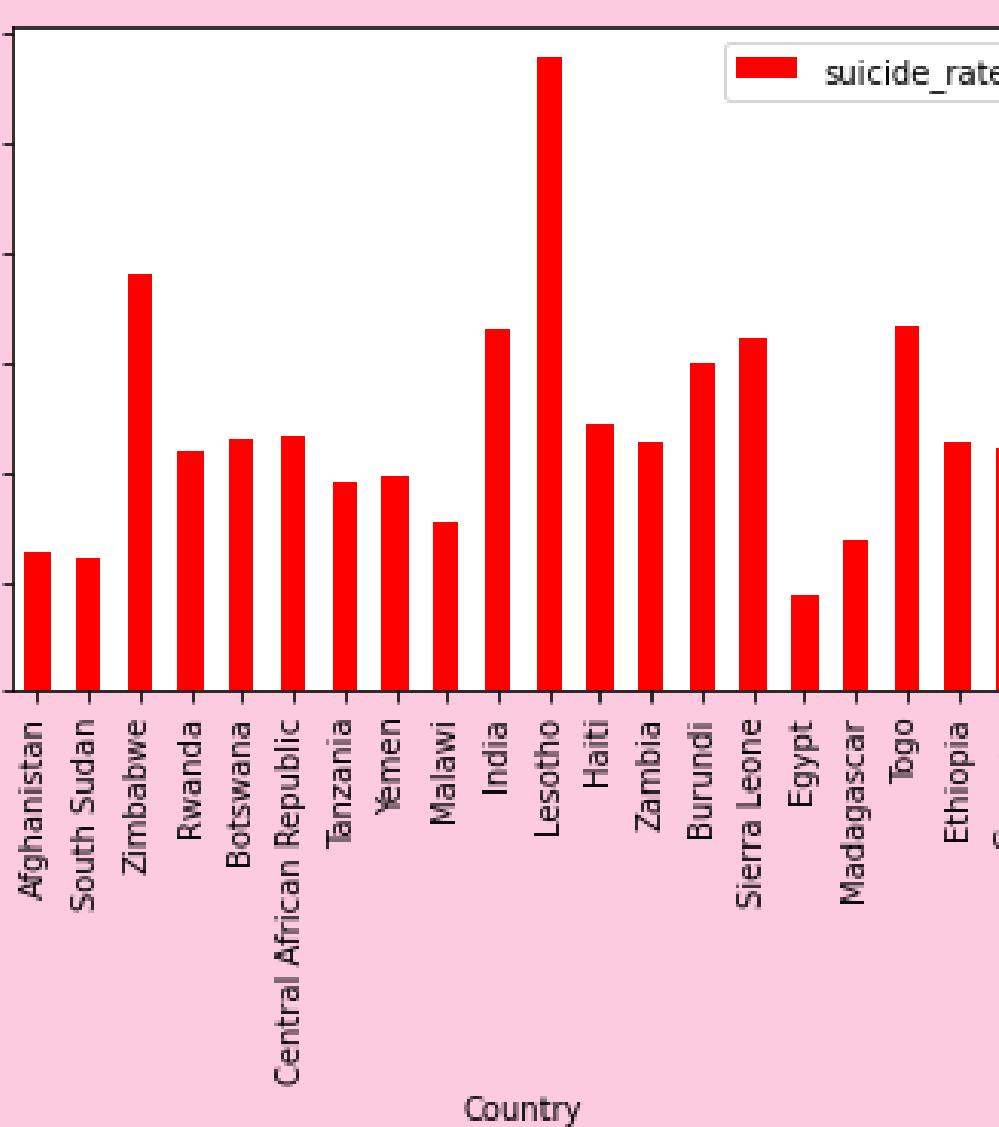
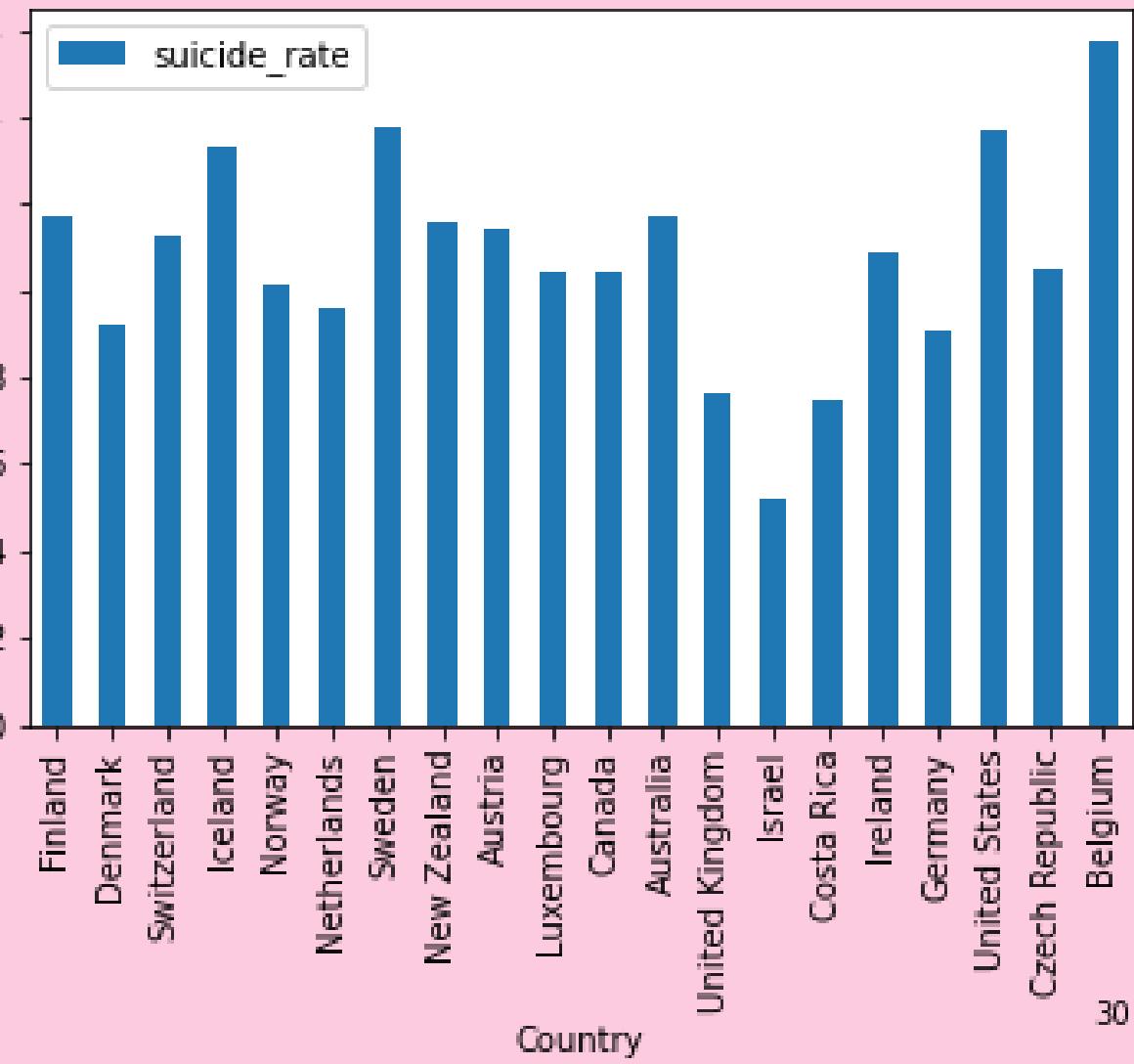
Urbanization rate is one part the total population living in urban areas, the second part is projected average rate of change of the size of urban population over a given period of time. The 20 lowest countries in happiness have a mix of urbanization, but the top 20 show consistency in urbanization.





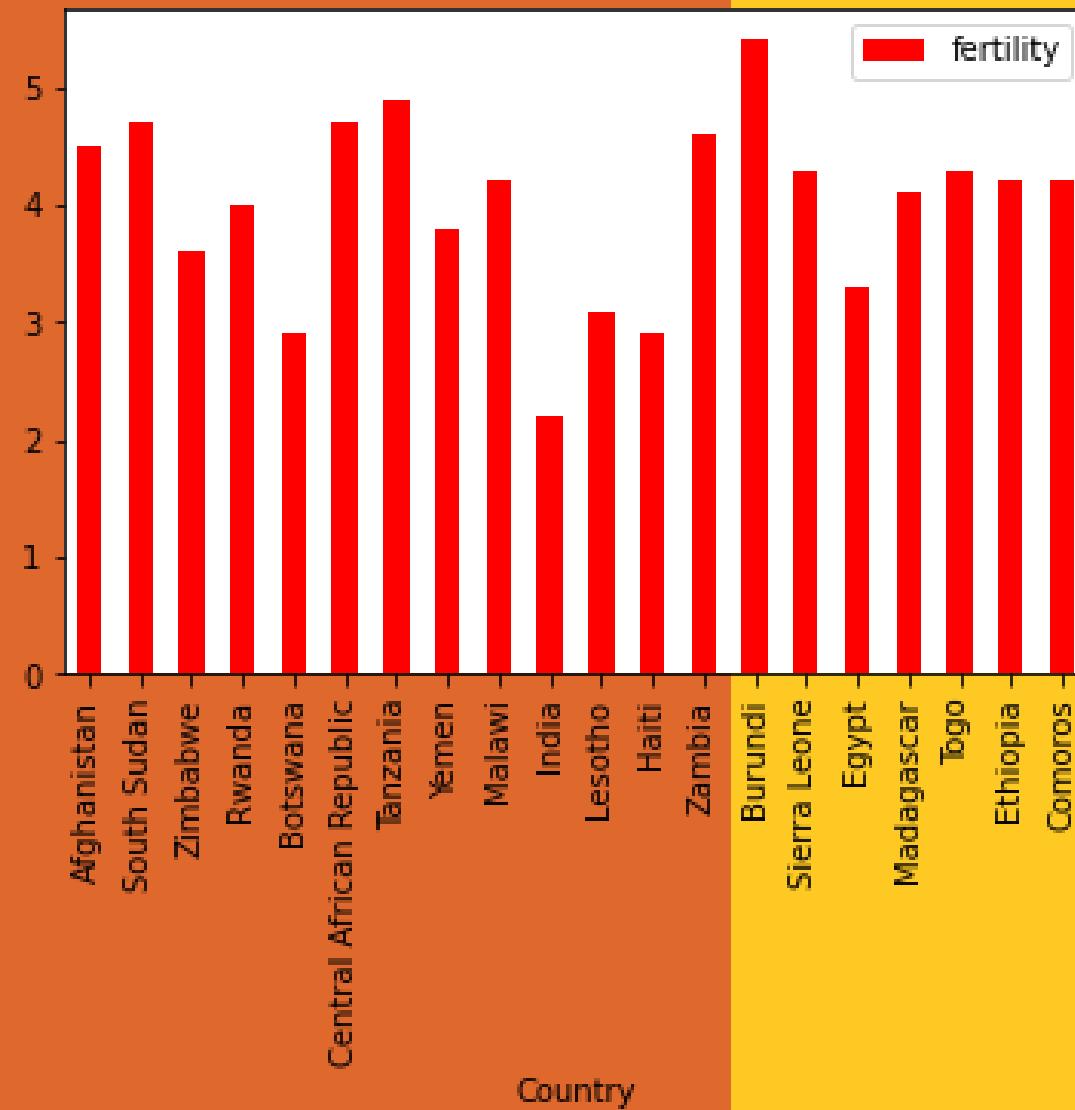
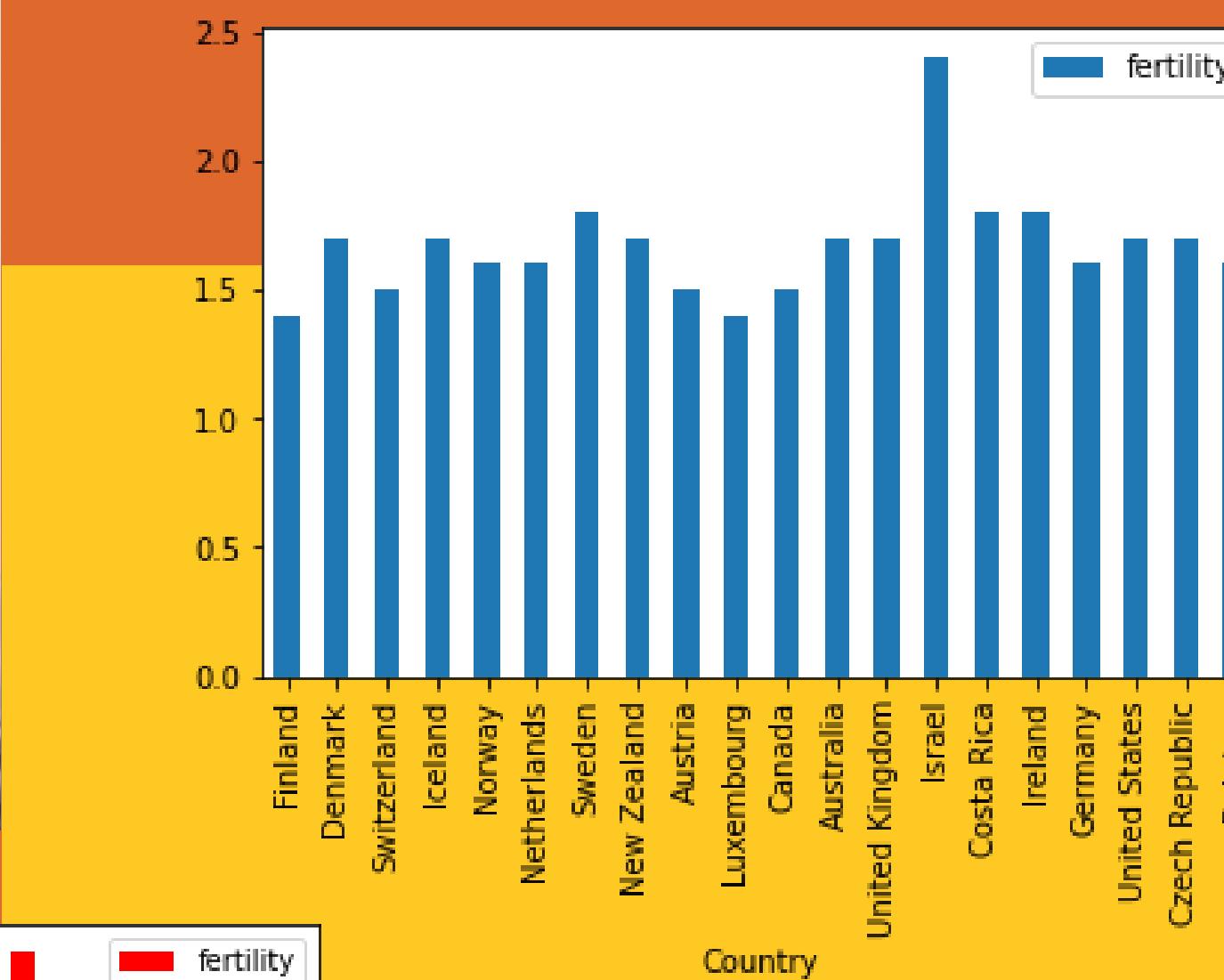
Meat-Consumption

Looking at meat-consumption is looking at meat consumed by population. This includes all animal products. The happiest countries show a range of higher meat consumption than the unhappiest countries.



Suicide-Rates

Suicide-rate are based on the number of suicides in the country per year. In these graphs we see a switch in the top 20 happiest countries have higher suicide rates then the bottom 20.



Fertility Rates

Fertility rates are based on the number of children women have in the year. The happier countries show consistent and lower fertility rates than the bottom 20 of the happiness scale.

GDP-Per Capita

The GDP per capita is looking at the population of each country and the happiness based on the population.



Fertility Rates

Fertility rates are based on the number of children women have in the year.



Urbanization

Urbanization rate is one part of the total population living in urban areas, the second half is projected average rate of change of the size of urban population over a given period of time.



Conclusion

Our findings show the GDP Per Capita, Urbanization Rate and Fertility relate to the highest happiness rates.

These are just a few factors that result in a country being a happy place to live. We found some were obvious, like GDP, and some less so, like urbanization, and many that we did not analyze. All people are susceptible to the negative ramifications of a bad environment, and the key to being a happy country is creating a land with opportunity and access to resources.