**Country Happiness Study**

Team members: Monica Ramos, Xuancong Tran, Lisa Cannon

**Description**

In this study, we want to answer the generalized question of what influences the level of happiness in a given country? To answer this question, we will look for a correlation of happiness score by country to demographic information like GPD, population density, birthrate, amount of coastline, number of phones per person, average temperature, median age, risk of natural disaster, average sunshine duration, and alcohol consumption.

Additionally, does the happiness rating of surrounding counties influence a given country’s happiness rating? To answer this, we will look at the location (latitude and longitude) of each country to see how accurately the happiness rating of surrounding countries can predict a given country’s rating.

**Data sources**

Happiness score for 3 years (2015-2017) is found here in cvs files: <https://www.kaggle.com/unsdsn/world-happiness>

Demographics including GDP, population density, birthrate, number of phones, amount of coastline is in this data set: <https://www.kaggle.com/fernandol/countries-of-the-world>

Median age is here: <https://en.wikipedia.org/wiki/List_of_countries_by_median_age>

Alcohol consumption: <https://en.wikipedia.org/wiki/List_of_countries_by_alcohol_consumption_per_capita>

We ended up using this for alcohol consumption: <http://apps.who.int/gho/data/node.main.A1036>

X-we don’t need this Weather data api: <https://openweathermap.org/>

Risk of natural disaster: <https://en.wikipedia.org/wiki/List_of_countries_by_natural_disaster_risk#Rankings_by_country>

Sunshine duration data: <https://en.wikipedia.org/wiki/List_of_cities_by_sunshine_duration>

Geographic coordinates: <https://www.kaggle.com/eidanch/counties-geographic-coordinates/downloads/counties-geographic-coordinates.zip/1>

Average temperature by country: <https://en.wikipedia.org/wiki/List_of_countries_by_average_yearly_temperature>

**Data we Actually used**

Alcohol consumption

We ended up using this for alcohol consumption: <http://apps.who.int/gho/data/node.main.A1036>

Median Age 2016

<http://world.bymap.org/MedianAge.html>

Population

<https://data.worldbank.org/indicator/SP.POP.TOTL?most_recent_year_desc=false>

Population Density

<https://data.worldbank.org/indicator/EN.POP.DNST?most_recent_year_desc=false>

GDP

<https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?most_recent_year_desc=false>

PPP

<https://data.worldbank.org/indicator/NY.GDP.MKTP.PP.CD?most_recent_year_desc=false>

~~Paid vacation and Public Holidays by country~~

[~~https://en.wikipedia.org/wiki/List\_of\_minimum\_annual\_leave\_by\_country~~](https://en.wikipedia.org/wiki/List_of_minimum_annual_leave_by_country)

Not 2016, will do what we can with it

Education Index

<http://hdr.undp.org/en/data>