Predictors of Global Happiness

Objective

The World Happiness Report uses 6 predictors: GPD Per Capita, Life Expectancy, Social Support, Freedom, Generosity and Corruption to explain inter-country variances in happiness. I would like to investigate if there are additional measures that can be used to explain those differences. Using data from the World Bank and UN that contain statistics on a myriad of topics from gender inequality to population density to economic freedom, I would like to identify additional indicators for happiness.

Target Audience

The more factors we have to better explain variations in happiness, the more effective toolkit governments, politicians and organizations have to make more informed policy decisions.

Data

World Happiness (2015, 2016, 2017, 2018) - http://bit.ly/3a1Urdd

- The 2019 World Happiness Report includes a download with information on World Happiness scores for 155 countries from 2008 to 2018 and includes the six predictors described above as well as a dystopia residual for each country.

Economic Freedom (2015, 2016, 2017, 2018) - https://herit.ag/2Uj9bOp

- Since 1995, the Heritage Foundation has assessed an economic freedom index for countries based on 12 economic freedoms: Property Rights, Judicial Effectiveness, Government Integrity, Tax Burden, Government Spending, Fiscal Health, Business Freedom, Labor Freedom, Monetary Freedom, Trade Freedom, Investment Freedom, and Financial Freedom.

Gender Development and Inequality (2015, 2016, 2017, 2018) - http://hdr.undp.org/en/data

- The United Nations Development Program has human development data from 1990 to the present. Gender Development and Gender Inequality Indexes are included in that data.

Population Density (2015, 2016, 2017, 2018) - http://bit.ly/2Qr0oZr

- The World Bank has population density (people per sq. km of land area) data dating back to 1961.

Approach

1. Analyze each data set and finalize what predictors from each dataset I would like to examine.
2. Clean each dataset based on the predictors I would like to analyze and year, as well as ensuring that countries correspond in each dataset.
3. Statistical analysis engineering: calculate coefficients, standardized coefficients, r-squared analysis, etc.
4. Exploratory statistical analysis on additional predictors and indicators to happiness across the globe
5. Based on statistically significant correlations found, build regressions and data storytelling based on correlations found
6. Visual model - draw a world map based on happiness index
7. Identify challenges with approach / results and provide recommendations on how to improve for future analysis

Deliverables

Associated code, milestone reports and presentation. Additionally, I plan to publish a blog post as my final presentation.