

Potential Impact of Non-Traditional Variables on a Country's Happiness

Group 12: The Happy Group

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Statement of Purpose:

The objective of this analysis is to try to understand if certain non-traditional factors or metrics could play a significant role in determining the happiness of a country's citizens. Based on the findings of the world happiness index, we could not help but notice that certain factors, we personally believe to be important in determining our happiness, were not variables in the happiness equation. Your core data must be extracted from the world happiness reports for the 2015 to 2019 timeframe.

Scope:

1. Data Extraction:

You must extract data from several sources (mentioned below) for 2015 to 2019 unless otherwise unavailable. The individual CSVs should not be particularly long (rows) given the limited amount of countries in the world but the multitude of metrics and/or variables we have selected should provide you with ample data. Naturally, some of data might be missing because of the lack of adequate reporting standards in certain countries. Consequently, you must carefully consider how to eliminate certain countries based on the lack of available data and whether eliminating said data will affect the end-result.

2. Data Transformation:

Once the data extraction is complete, we require that adequate cleaning and compiling be undertaken to provide us with a thorough analysis. This may include joining, filtering, and linking tables. Tools such as Python, SQL and MongoDB can be used at this stage of the project. The use of relational or non-relational databases is at your discretion subsequent to the study of the underlying data.

3. Data Load:

In this final section, you would need to load the transformed data that has been produced in the previous step and prep it for delivery. The data must conform to the standards set forth by our company. Furthermore, it must be easy to work with and straightforward.

4. Out of Scope:

- The use of any other technology, including any visualizations, are not part of this project.
- Future technical support for any delivered datasets is not required.

Data Sources:

The below data sources will be compiled from 2015 to 2019.

1. World Happiness Reports - United Nations Sustainable Development Solutions Network.
2. Homicide Rate per 100,000 people – World Bank Data.
3. The Global Innovation Index – World Intellectual Property Organization & INSEAD.
4. Fertility Rate, Births per Woman – World Bank Data.
5. Average Days and/or Hours of Sunshine per Year and/or Day – Various Meteorological Websites & Sources.

Optional: Data sources 2 to 5 could be cleaned and compiled into a single file.

Assumptions:

1. Data is accurate since it is compiled by supranational, governmental, or educational sources.
2. Averages and related data are not significantly influenced by the lack of available data for countries, mainly third world ones.
3. Data is final. No changes made in retrospect.
4. Expenses will remain within the allocated budget for this project. No renegotiation of terms and conditions is permitted.
5. Delivery will be made within the specified timeframe.