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Achievement 6

World Happiness Report 2018-2023

Motivation:

The analysis aims to provide a general overview of happiness worldwide. It intends to answer which factors play a significant role and to what extent the happiness of countries has changed over time. Several key questions are used to assist us in creating a general overview.

Key questions:

• What factors influence happiness the most?

• Has the overall (average) happiness changed over the years?

• Have there been changes during the time of the COVID-19 pandemic?

• If changes are apparent, has there been a shift in the ranking that has also impacted subsequent years?

• Is there a general difference between regions?

Timeframe:

I will focus on the period from 2018 to 2023 during the analysis. On one hand, this aims to provide a current overview. On the other hand, one of the central questions is to what extent the situation has changed due to the COVID-19 pandemic. For this purpose, data from previous years (before the pandemic) will also be necessary, to determine if there is a discrepancy between the different years.

Data Source:

This data has been imported from Kaggle and consists of the individual World Health reports of the last six years. This is not a single dataset but multiple ones (for each individual year). These will be later consolidated into a general dataset.The links to the individual datasets can be found in the appendix

Data Collection Method:

Data from the World Happiness Report is collected in various ways. Hereby it should be distinguished between the Happiness Score on one hand and the six other factors: GDP per capita, social support, freedom to make life choices, healthy life expectancy, generosity, and perceptions of corruption on the other hand.

The Happiness Score is based on responses from the Gallup World Poll. This poll consist of large scale surveys. A central role is played by the Cantril Ladder in this context. Individuals are asked to imagine an imaginary ladder with steps ranging from 0 to 10, where 0 represents the worst possible and 10 represents the best possible life. They are then asked to assess where their current life stands on this ladder. The other six factors do not contribute to the overall happiness score, but can be further explored to explain what factors may lead to general happiness within a country.

Data Limitations

The results of the World Happiness Report, at least in terms of the overall scores, are heavily dependent on the Gallup World Poll. With such a dominant role of a single source, certain biases may naturally arise. The exact number of respondents is not consistent for each year, but it surpasses 100,000 individuals across over 130 countries. There are at least 195 sovereign nations (UN recognized), so there are a lot of countries missing in the report. The report includes most of the biggest countries in the world, and a lot of the missing countries are small island states. It therefore still displays how happiness is distributed around the world for the majority of the population. At the same time it is important to note that this is not a full representation of the global population.

Additionally, the score is based on opinions and is not measured through objective metrics. This may lead to a cultural bias. Different cultures have distinct ways of expressing themselves, as well as an inherently different perspective on "happiness." This can result in the same life

situation being perceived differently by individuals from various cultures. Not only culturally, but also among individuals, differences exist. Some people may be quicker to feel dissatisfied, , which could potentially skew the data.

Data Trustworthiness

Despite acknowledging some limitations and potential biases in the report, it is still the globally most recognized report for measuring the general happiness of people in different countries. The report is not only acknowledged but also utilized by internationally significant organizations such as the United Nations and the World Bank. The data can therefore be considered as trustworthy.

Data Types:

Variable	Description	Time-variant/-invariant	Structured/ Unstructured	Qualitative/ Quantitative	If Qualitative: Nominal/ Ordinal	If Quantitativ: Discrete/Continuous
Country	Individual country included in the report	Time-invariant	Structured	Qualitative	Nominal	N/A
Region	Geographic classification of the individual countries	Time-invariant	Structured	Qualitative	Nominal	N/A
Year	Specific year for which the happiness data is reported	Time-variant	Structured	Quantitative	N/A	Discrete
Happiness Rank	Numerical position of each country based on the happiness score	Time-variant	Structured	Quantitative	N/A	Discrete
Happiness Score	Single measure of a country's overall happiness	Time-variant	Structured	Quantitative	N/A	Continuous
Economy (GDP per Capita)	Measure of economic output of a country per person	Time-variant	Structured	Quantitative	N/A	Continuous
Social Support	Measure of the perceived availability of support systems within a country	Time-variant	Structured	Quantitative	N/A	Continuous
Health (Life Expectancy)	Measure of health within a country based on life expectancy and overall well-being of the population	Time-variant	Structured	Quantitative	N/A	Continuous
Freedom (Life Choices)	Measure of personal and societal freedom within a country	Time-variant	Structured	Quantitative	N/A	Continuous
Generosity	Measure of selfless acts and altruistic behavior	Time-variant	Structured	Quantitative	N/A	Continuous
Perceptions of Corruption	Measure of perceived level of corruption within a country	Time-variant	Structured	Quantitative	N/A	Continuous

Appendix:

<u>Data to the World Happiness Report</u>

- <u>World Happiness Report 2018</u>

- <u>World Happiness Report 2019</u>

- <u>World Happiness Report 2020</u>

- <u>World Happiness Report 2021</u>

- <u>World Happiness Report 2022</u>

- <u>World Happiness Report 2023</u>