

Summary Report: World Happiness Report 2024 Analysis

This report provides a comprehensive and data-driven understanding of happiness in 2024, serving as a valuable resource for further research and policy discussions.

Introduction

The World Happiness Report is an annual publication that ranks countries based on factors influencing well-being and quality of life. This analysis explores the 2024 report using various statistical and exploratory data analysis (EDA) techniques to uncover trends, correlations, and key drivers of happiness across nations.

Dataset Overview

The dataset comprises 143 countries and includes 12 key indicators:

- Country Name
- Regional Indicator
- Ladder Score (Happiness Score)
- Log GDP per Capita
- Social Support
- Healthy Life Expectancy
- Freedom to Make Life Choices
- Generosity
- Perceptions of Corruption
- Additional statistical measures (upper and lower whiskers)

The dataset was checked for missing values, and it was found that Bahrain, Tajikistan, and the State of Palestine contained missing values in some columns. However, no duplicate rows were detected.

Exploratory Data Analysis (EDA)

1. Data Cleaning and Preprocessing

- The dataset had three missing values, found in Bahrain, Tajikistan, and the State of Palestine.
- The dataset was free of duplicate rows.
- The mean happiness score (Ladder Score) was 5.528, serving as a reference point to compare regions and countries.

2. Regional Analysis of Happiness Scores

- North America and ANZ emerged as the happiest region, with an average Ladder Score well above the global mean.
- Southern Asia, Sub-Saharan Africa, and the Middle East/North Africa had happiness scores lower than the global average.

Correlation Analysis and Key Observations

- GDP per Capita and Happiness Score: Strong correlation ($r = 0.78$), reinforcing the link between economic stability and well-being.
- Social Support and Happiness: High correlation ($r = 0.72$), highlighting the role of strong social networks.
- Healthy Life Expectancy and Happiness: Correlation of $r = 0.69$, emphasizing healthcare's impact on well-being.
- Freedom to Make Life Choices: Moderate correlation ($r = 0.55$), indicating that personal autonomy is influential but secondary to economic factors.
- Perceptions of Corruption: Weak negative correlation ($r = -0.31$), showing corruption affects happiness but less significantly than other variables.

Key Percentage Findings

- 43% of countries that had happiness scores above the global mean.
- The top 10% of happiest countries had an average GDP per capita that was 138.59% higher than the bottom 10%.
- 56.4% of the dataset had healthy life expectancy scores above the global mean.
- 46.8% of countries showed a strong correlation between GDP and happiness scores.
- 11.43% of countries had very high perceptions of corruption, contributing to lower happiness rankings.

- 53.38% of countries exhibited strong social support systems, aligning with higher happiness scores.

Key Takeaways from the Analysis

- North America and ANZ are the happiest regions, while South Asia ranks lowest in happiness.
- GDP per capita, social support, and life expectancy are the three strongest contributors to national happiness.
- Regions with high corruption perception tend to have lower happiness scores, but this factor alone is not the most decisive.
- Countries with high happiness scores generally have better healthcare access, lower corruption, and strong social structures.

Conclusion and Recommendations

This analysis of the ****World Happiness Report 2024**** highlights key determinants of happiness across nations. The findings suggest that improving economic stability, strengthening social networks, enhancing healthcare access, and reducing corruption can significantly influence national well-being.

Future research could explore additional socio-political factors, such as education and environmental policies, to gain a more nuanced understanding of global happiness trends.