



World Happiness Report 2021

Exploring the Factors Influencing Global Happiness

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Introduction

What is the World Happiness Report?

A global ranking of 149 countries based on citizens' self-reported well-being. Uses the Ladder Score: A scale from 0 (worst possible life) to 10 (best possible life).

Scope of the Dataset

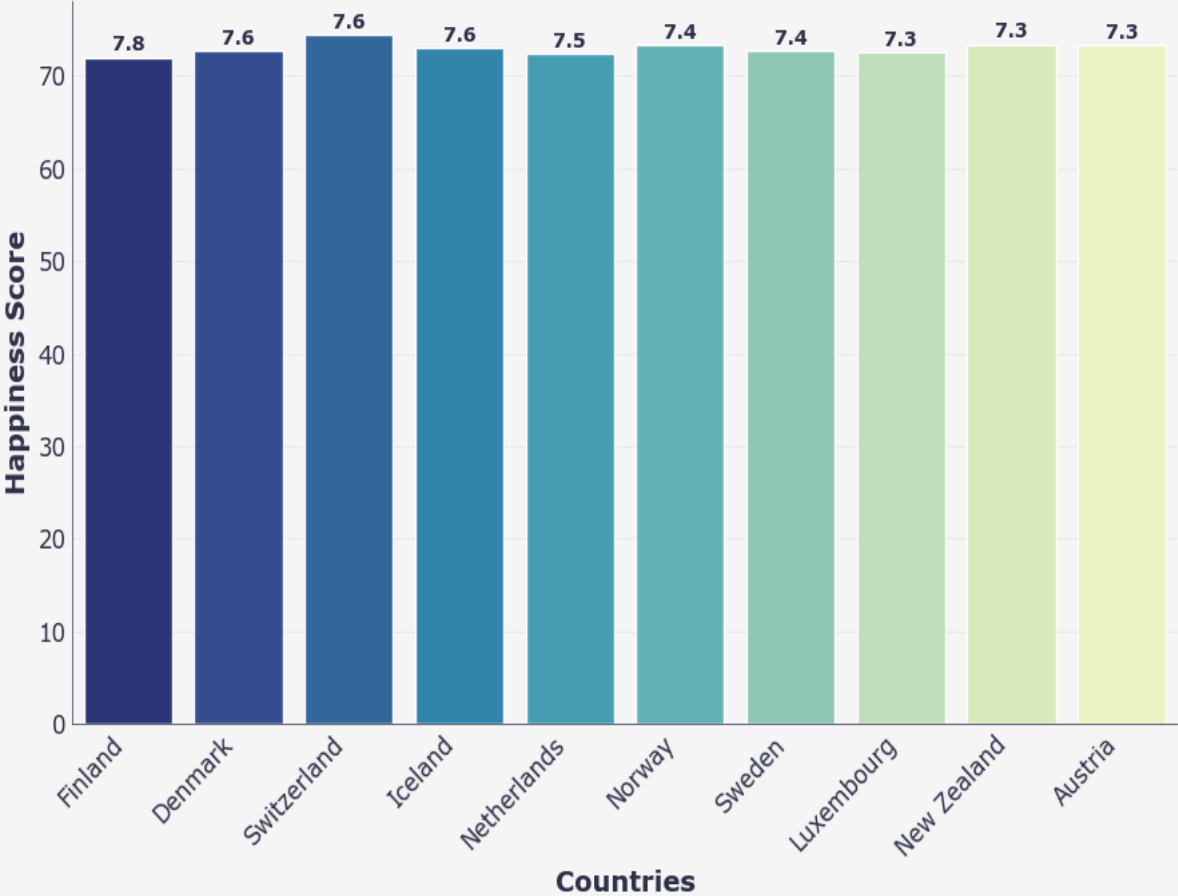
Countries: 149
Regions: 10
Year: 2021

Purpose of the Analysis

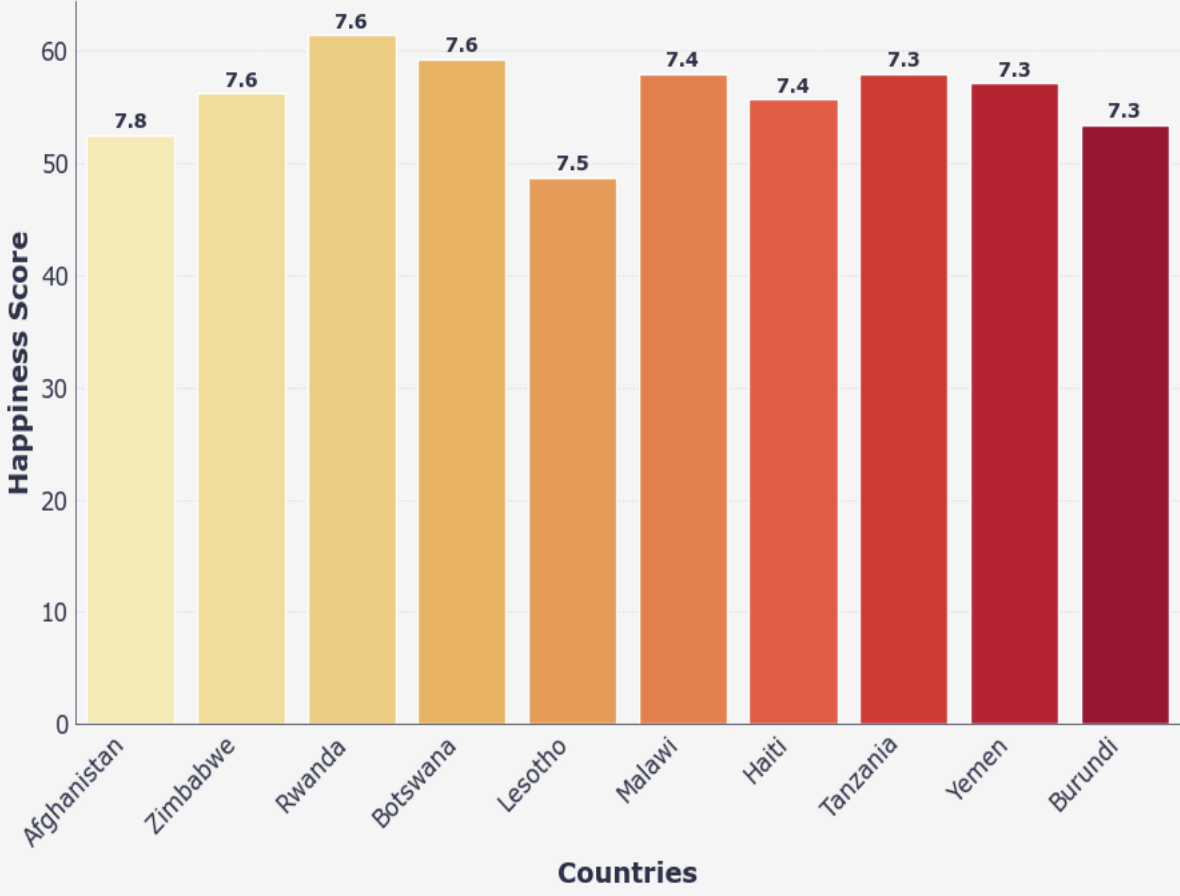
To uncover the factors influencing happiness and their relationships.

Global Happiness Comparison

Top 10 Happiest Countries



Top 10 Least Happy Countries





Big Idea

Happiness is influenced by a complex interplay of economic, social, and political factors.

Understanding these relationships can help shape policies to improve global well-being.

Key Factors Influencing Happiness

Core Factors

GDP per capita (economic prosperity)

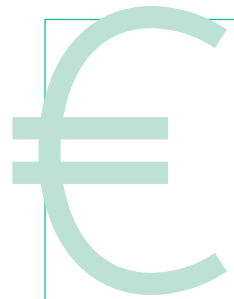
Social support (strength of personal relationships)

Healthy life expectancy (years of good health)

Freedom to make life choices (autonomy in decision-making)

Generosity (charitable behavior)

Perceptions of corruption (trust in institutions)



Happiness vs. GDP per capita

Strong positive correlation.

Exceptions: Latin American countries show high happiness despite modest GDP.



Happiness vs. Social Support

One of the strongest predictors of happiness.

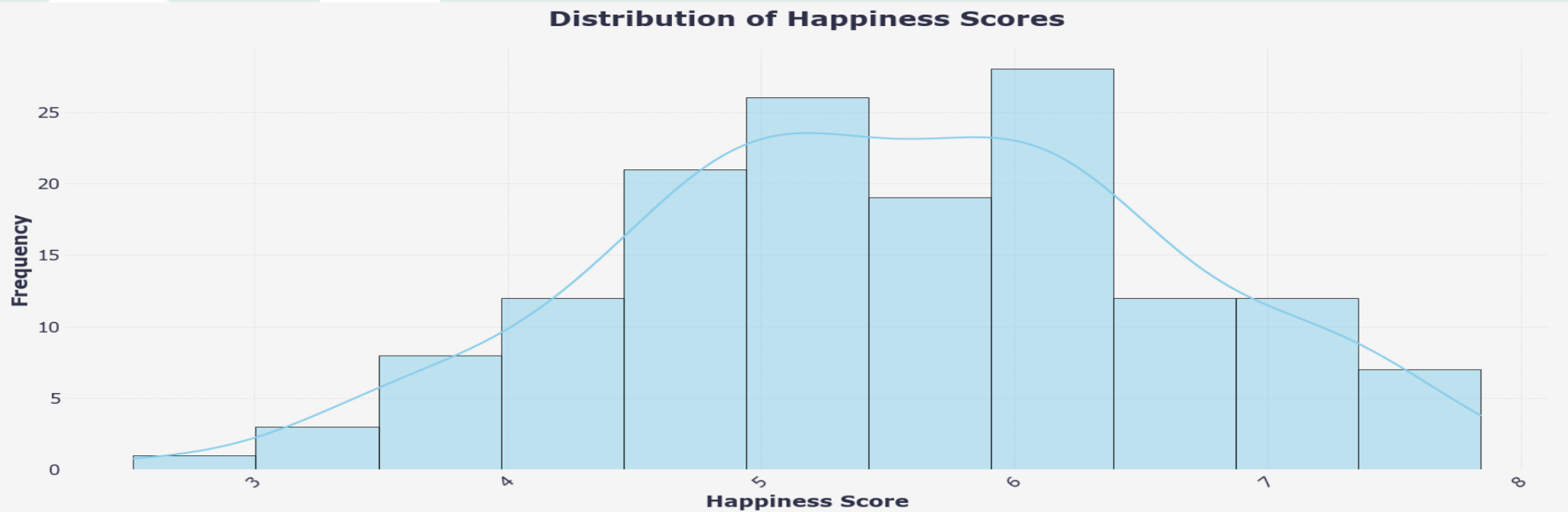
Example: Costa Rica ranks high due to strong community bonds.



Happiness vs. Corruption

Negative correlation: Higher corruption leads to lower happiness.

Example: Finland and Denmark benefit from low corruption.



The histogram offers a clear visual summary of the distribution of happiness scores across the dataset. It reveals that most countries have happiness scores in the moderate range, with fewer countries exhibiting extremely high or low scores. The inclusion of the KDE (Kernel Density Estimate) line enhances the visualization by smoothing out the distribution, making it easier to identify overall trends and patterns.

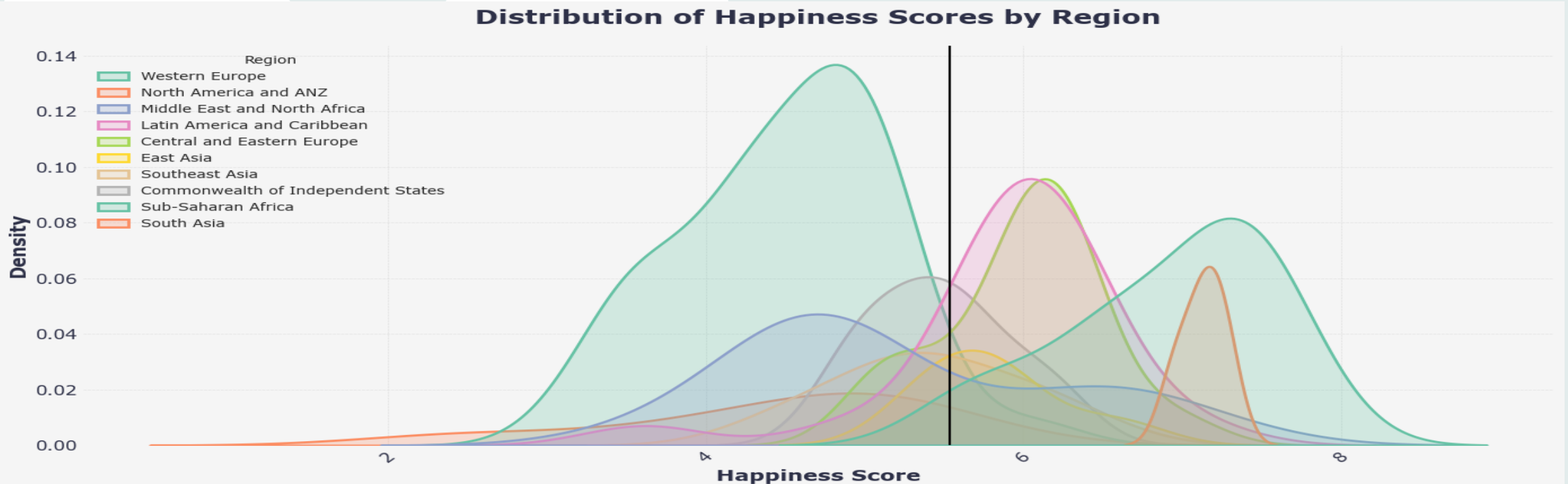
Most countries fall within a moderate happiness range.

Few countries exhibit extremely high or low scores.

Regional Comparison

Regions like North America, ANZ, and Western Europe have higher average happiness scores.

Sub-Saharan Africa and South Asia have lower scores.

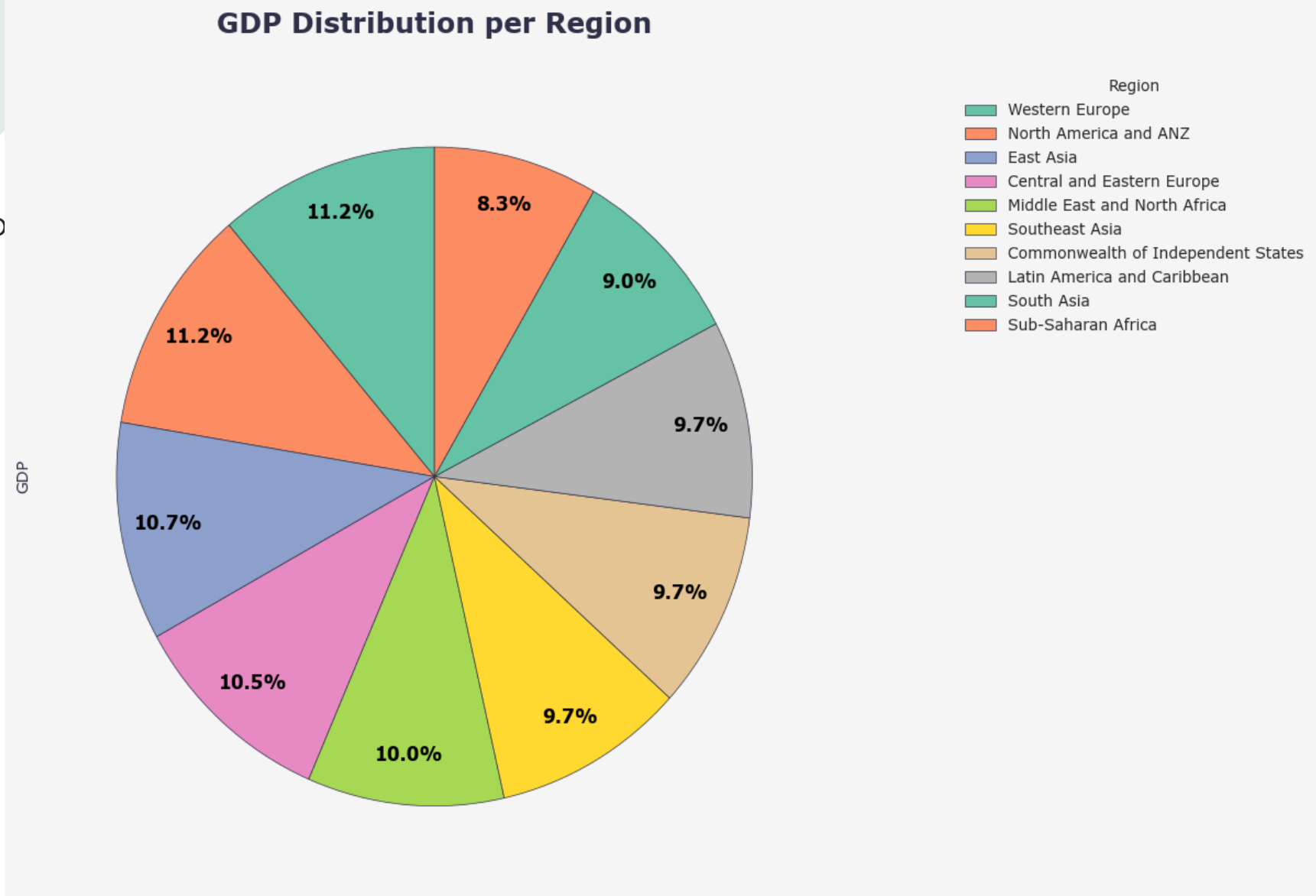


The KDE plot provides a smooth estimate of the distribution of happiness scores across different regions. Each curve represents the density of happiness scores within a specific region, allowing for easy comparison between regions. The plot reveals that regions such as North America and ANZ, and Western Europe have higher peaks, indicating higher average happiness scores. In contrast, regions like Sub-Saharan Africa and South Asia show lower peaks, reflecting lower average happiness scores. The KDE plot helps to identify the central tendency and spread of happiness scores within each region, highlighting regional differences in happiness levels.

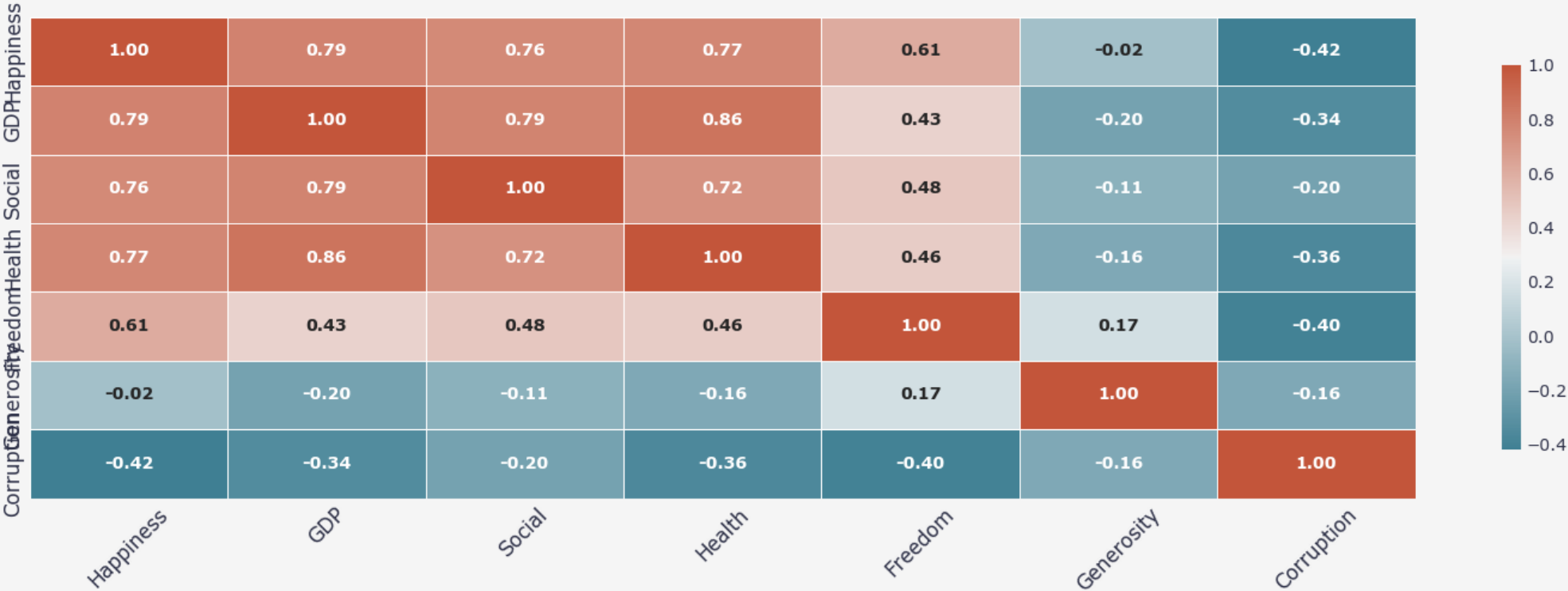
Economic Disparities

Western Europe and North America contribute the most to global GDP.

Sub-Saharan Africa and South Asia contribute the least.



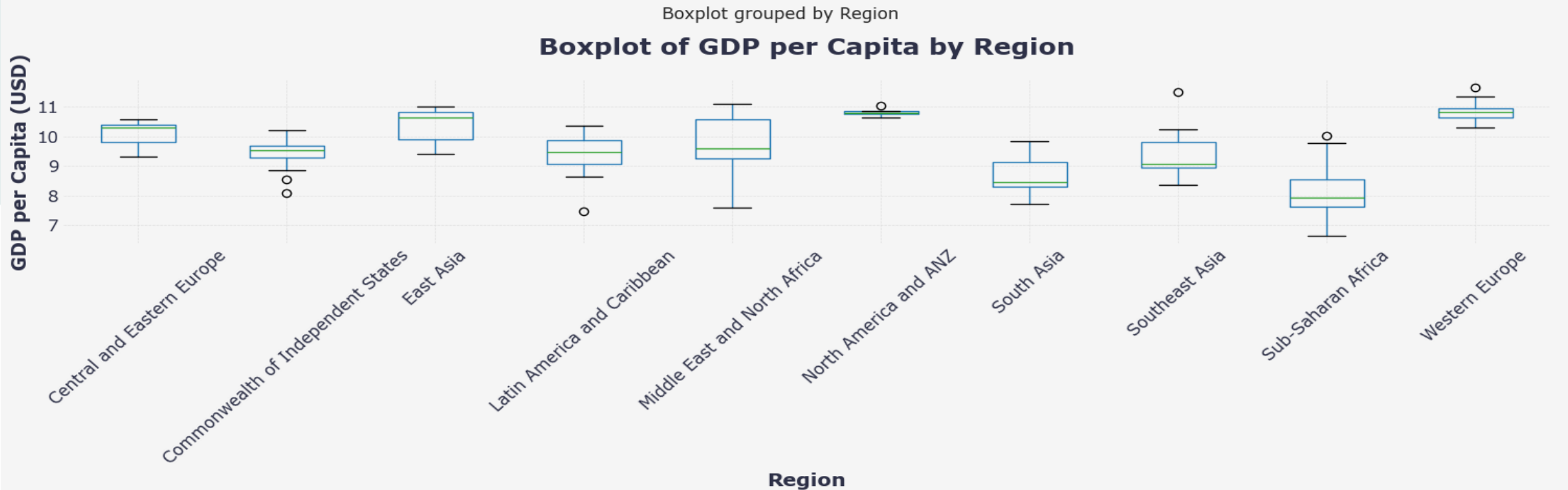
Correlation Matrix of Happiness Factors



The heatmap provides a visual representation of the correlation matrix for various happiness factors. The values in the heatmap represent Pearson correlation coefficients, which range from -1 to 1. A value close to 1 indicates a strong positive correlation, a value close to -1 indicates a strong negative correlation, and a value close to 0 indicates no correlation. Happiness has strong positive correlations with GDP (0.79), Social support (0.76), and Health (0.77), suggesting that higher GDP, better social support, and better health outcomes are associated with higher happiness levels. Happiness also has a moderate positive correlation with Freedom (0.61) and a negative correlation with Corruption (-0.42), indicating that higher perceived corruption is associated with lower happiness levels. GDP has strong positive correlations with Social support (0.79) and Health (0.86), and a negative correlation with Corruption (-0.34). Social support has strong positive correlations with Health (0.72) and moderate positive correlations with Freedom (0.48), and a negative correlation with Corruption (-0.20). Health has strong positive correlations with GDP (0.86) and Social support (0.72), and a negative correlation with Corruption (-0.36). Freedom has a moderate positive correlation with Happiness (0.61) and a negative correlation with Corruption (-0.40). Generosity has weak correlations with other factors, with the highest being a positive correlation with Freedom (0.17). Corruption has negative correlations with all other factors, with the strongest negative correlation being with Happiness (-0.42).

Strong positive correlations: Happiness with GDP (0.79), Social support (0.76), and Health (0.77).

Negative correlation: Happiness with Corruption (-0.42).



The boxplot provides a visual summary of the distribution of GDP per capita across different regions. Each box represents the interquartile range (IQR) of GDP per capita within a region, with the line inside the box indicating the median GDP per capita. The whiskers extend to the minimum and maximum values within 1.5 times the IQR, and any points outside this range are considered outliers and are plotted as individual points. For example, Western Europe and North America and ANZ have higher median GDP per capita, around 11, with relatively tight distributions and few outliers. Regions like Sub-Saharan Africa and South Asia have lower median GDP per capita, around 8, with wider distributions and some outliers. This visualization helps to identify the central tendency, spread, and outliers of GDP per capita within each region, highlighting the economic disparities between regions.

Western Europe and North America have higher median GDP with fewer outliers. Sub-Saharan Africa and South Asia have lower GDP with wider distributions.

Conclusion

Economic Strength

GDP matters, but it's not the sole determinant of happiness.

Health and Freedom

Long, healthy lives and autonomy are key contributors.

Social Connections

Strong community bonds significantly boost happiness.

Trust in Institutions

Low corruption increases national well-being.

The background is a solid teal color. It features several large, white, organic, cloud-like shapes that overlap each other. There are also four white circles of different sizes scattered around the composition: one in the top left, one in the top right, one in the bottom right, and one in the bottom center.

Thank You!