Richer, Older, Happier? Unpacking Global Trends in GDP, Longevity, and Social Support Report and Looker Studio Dashboard

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Executive Summary

This report aims to understand the interplay between worldwide economic factors and social dimensions in shaping the quality of life. Utilizing the World Happiness Report for 2020, I approached this analysis with a hypothesis that there would be a strong positive connection between four stated metrics- Healthy Life Expectancy, Social Support Score, Logged Gross Domestic Product (GDP) per capita, and Ladder Score (overall happiness index).

Analysis of the data and <u>the subsequent visualization dashboard</u> confirmed a strong correlation between these four metrics, supporting the hypothesis that more affluent countries with robust social support among citizens generally exhibit higher life expectancy and happiness rankings.

Nations and lawmakers can utilize these findings as a baseline for how their countries rank among neighboring nations. They can also provide valuable insights while crafting public policy to improve health and well-being statistics globally.

Selected Metrics

This report analyzes the WHR 2020 data and establishes the correlations between the following metrics and data points.

- Healthy Life Expectancy (HLE) is a critical indicator of a population's health and well-being. This longevity data comes from the World Health Organization (WHO).
- Social Support Score averages the response to the Gallup World Poll regarding the availability of help from relatives and friends in times of need.
- Logged GDP per capita is the natural logarithm of the GDP per capital value. This is the average economic output produced within a country per person.

• Ladder Score incorporates each country's overall happiness index, providing a comprehensive view of national well-being.

This report hypothesized that these selected metrics are interrelated, suggesting that economic prosperity and strong social bonds predict longer, happier lives.

Data Visualization

<u>The Looker Studio Dashboard created for this data set employs a multi-faceted approach</u> to present the data effectively and interactively.

- World Map and Filter: On the top of the dashboard, there is a filter box and a world map. The default setting of the world map shows a heat map showing the HLE of each country in the data set. A red (younger) to green (older) spectrum of color represents the range of ages.
 - The **filter** affects every chart and graph listed below. By typing in different countries, the viewer can compare and contract metrics from selected countries rather than the whole set.
- Scatter Plot: A scatter plot in the lower lefthand corner of the dashboard illustrates the three critical metrics chosen for this study. The Y-axis represents the Healthy Life Expectancy of each country, the X-axis represents the Social Support score, and the bubble size represents the country's average GDP per capita. There is a clear upward trend as points move right and the bubbles get larger to the point of blending in the given scale. This shows an apparent correlation between these three metrics.
- Maximum and Minimum Scorecards: A series of scorecards sits in the dashboard's center. These scorecards summarize the maximum and minimum

values of each of the four metrics. By presenting the maximum and minimum of each metric, a picture forms of the wide range of ages, wealth, social support, and overall happiness across the globe.

• Trend Comparison and Bar Charts: In the lower right section of the dashboard, each metric is represented in a bar chart to show comparisons and trends between each country.

<u>Insights</u>

Several key insights can be derived from the data and visualizations presented in this report.

- Correlation between National Wealth and Well-Being: The upward trend in the scatter plot, with increasing GDP per capita and social support associated with higher HLE, supports the hypothesis that a nation's economic prosperity is linked closely to better health outcomes and more robust social networks. However, on the upper end of the GDP scale, Social Support and Health Life Expectancy significantly impact the overall Ladder Score compared to GDP in determining the upper rankings.
- Impact of Social Support: The data reveals a deep correlation between robust interpersonal social support networks and higher happiness scores. This underlines the importance of community and familial support as a fundamental pillar to everyday well-being and ultimate longevity.
- Global Disparities in Happiness and Health: The maximum and minimum scorecards highlight significant disparities in HLE, social support, GDP per capita, and ladder scores. This indicates that while some countries excel in creating environments where healthiness and happiness can thrive, others lag significantly behind.

Application and Next Steps:

This data and these insights could be used countless ways to improve global well-being and health prospects. Understanding these correlations and the factors that drive them can inform policy decisions aimed at improving health and happiness.

For example, when comparing two countries, such as the highest-ladder-ranking Finland (Ladder Score 7.81) and the United States (Ladder Score 6.94, 18th overall), the data indicates that while the two countries have GDPs that top the scales in this data set (with the US slightly edging out Finland), the US lags severely behind the Nordic nation regarding HLE (68.3 in the US vs Finland's 71.9), Social Support (.91 vs .95), and Ladder Score (6.94 vs. 7.81). If the US Government wished to bring its HLE closer to the Nordic countries that top the WHR statistics, the US could address notable inequities in their nation's healthcare access compared to Finland, Denmark, and Switzerland, countries that top Ladder scores.

Additionally, the US could explore social and community programs to combat loneliness and create social bonds among citizens to bolster social support numbers. These actions could raise the Ladder Score and overall happiness index.

Conclusion

This analysis displays the significant role of economic stability and robust social support in enhancing national well-being and longevity. The strong correlations between GDP, social support, and health metrics across different nations highlight the need for comprehensive policies promoting economic equity and community ties. Ultimately, this study provides valuable insights that can guide policymakers in crafting strategies to improve life expectancy and overall happiness, drawing on the successful models of top-ranking countries.