What Drives Happiness?

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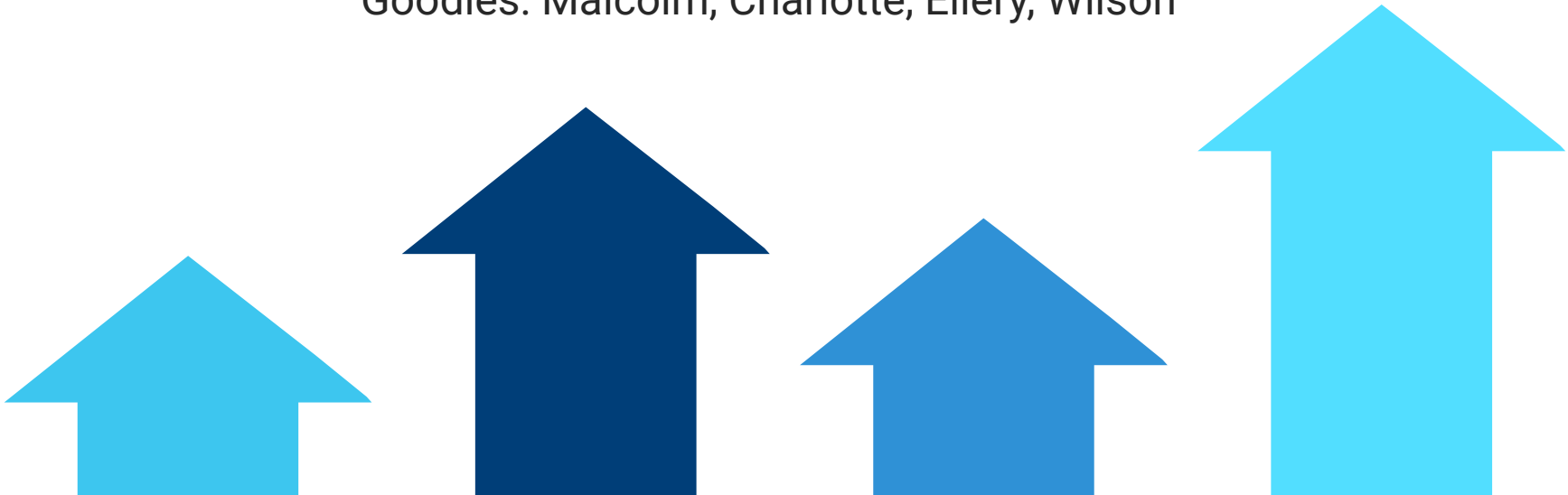


Introduction

National income measures such as GDP alone fail to capture how people in a country assess their lives. This naturally raises questions about how different economic indicators and social conditions relate to one another in ways that can better explain how people evaluate their lives in a country given its conditions.

Question: How do different drivers of happiness: GDP, self-measured freedom, and social support influence life satisfaction.

This analysis explores three main ideas:

- The relationship between social support and life satisfaction as countries grow wealthier
- Life satisfaction as influenced by GDP per capita alongside self-measured freedom
- Life satisfaction vs the unemployment gender gap.

Data Set





Self-reported or national statistics from 2023 - 2025, 146 countries

`country_name`| string | Name of the country where the data was collected from.

`year` | integer | The years the data was collected from

`freedom` | double | The average modeled point contribution to national happiness of citizens by their freedom to make life choices.

`social_support` | double | The modeled point contribution to national happiness reflecting whether individuals feel they have family or friends they can count on in times of trouble.

`life_evaluation`|double| National average score of how citizens rated their lives 1-10.

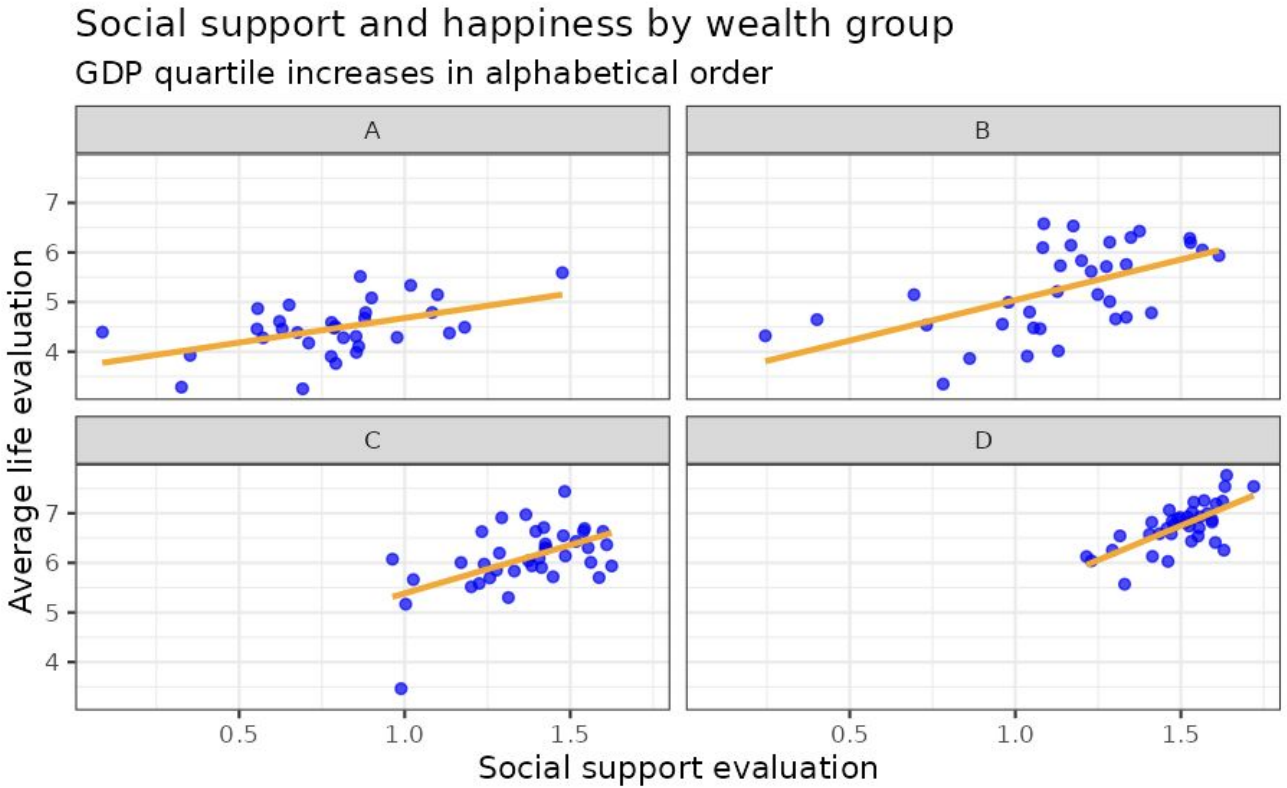
`gdp_per_capita` |double | A country's economic output per person. Adjusted for purchasing power for parity

`unemployment_male` |double | Percent of male labor force that is unemployed

`unemployment_female` |double | Percent of female labor force that is unemployed

`unemployment_gap` |double | Female unemployment rate minus male unemployment rate. (Created variable)

`wealth_group`| string | GDP per capita quartile, from A (lowest 25%) to D (highest 25%). (Created variable)

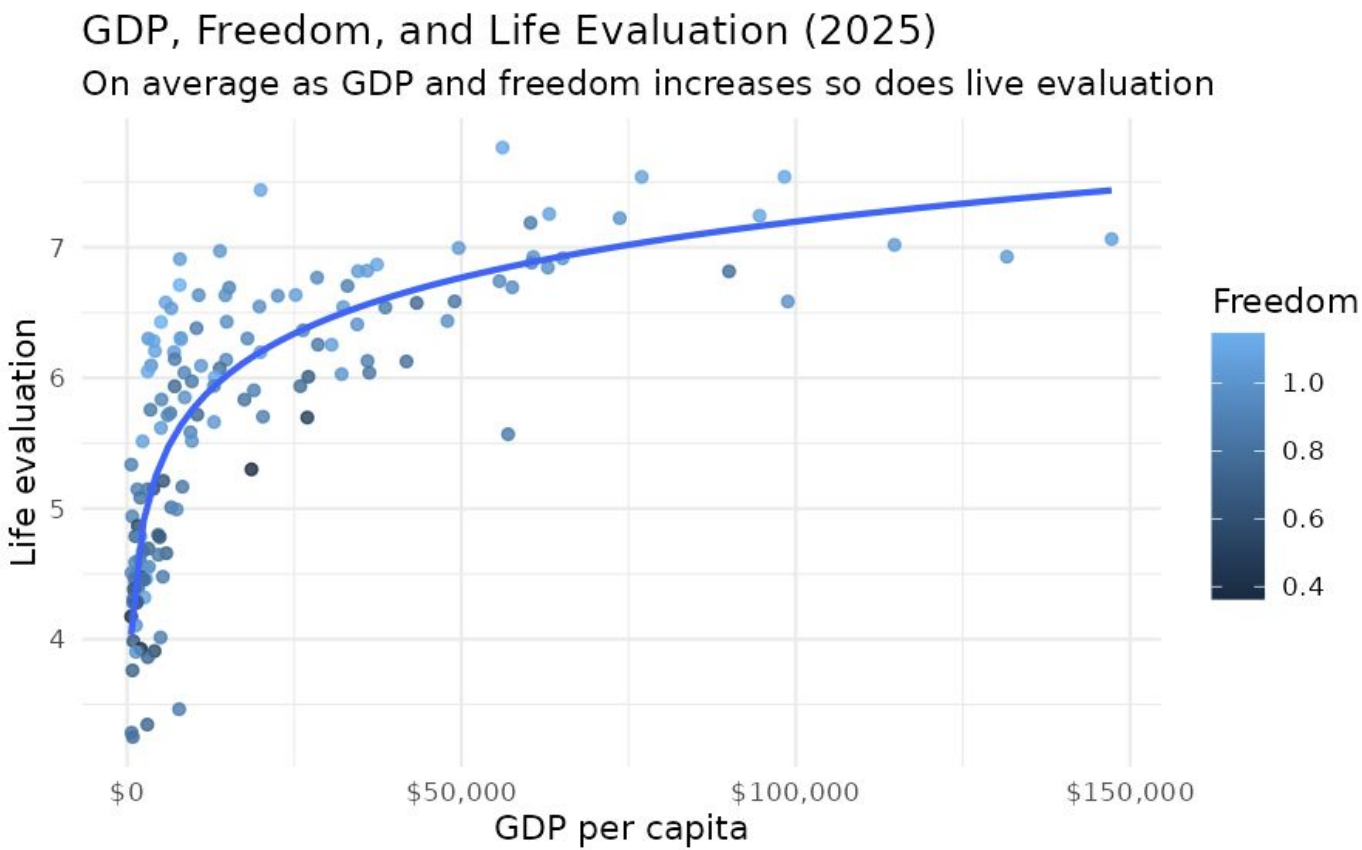


Key Takeaways

- R^2 value of 0.731
- Stronger correlation between life evaluation and social support as wealth increases

Implication

- Better economic conditions amplify the happiness benefits seen with social support.

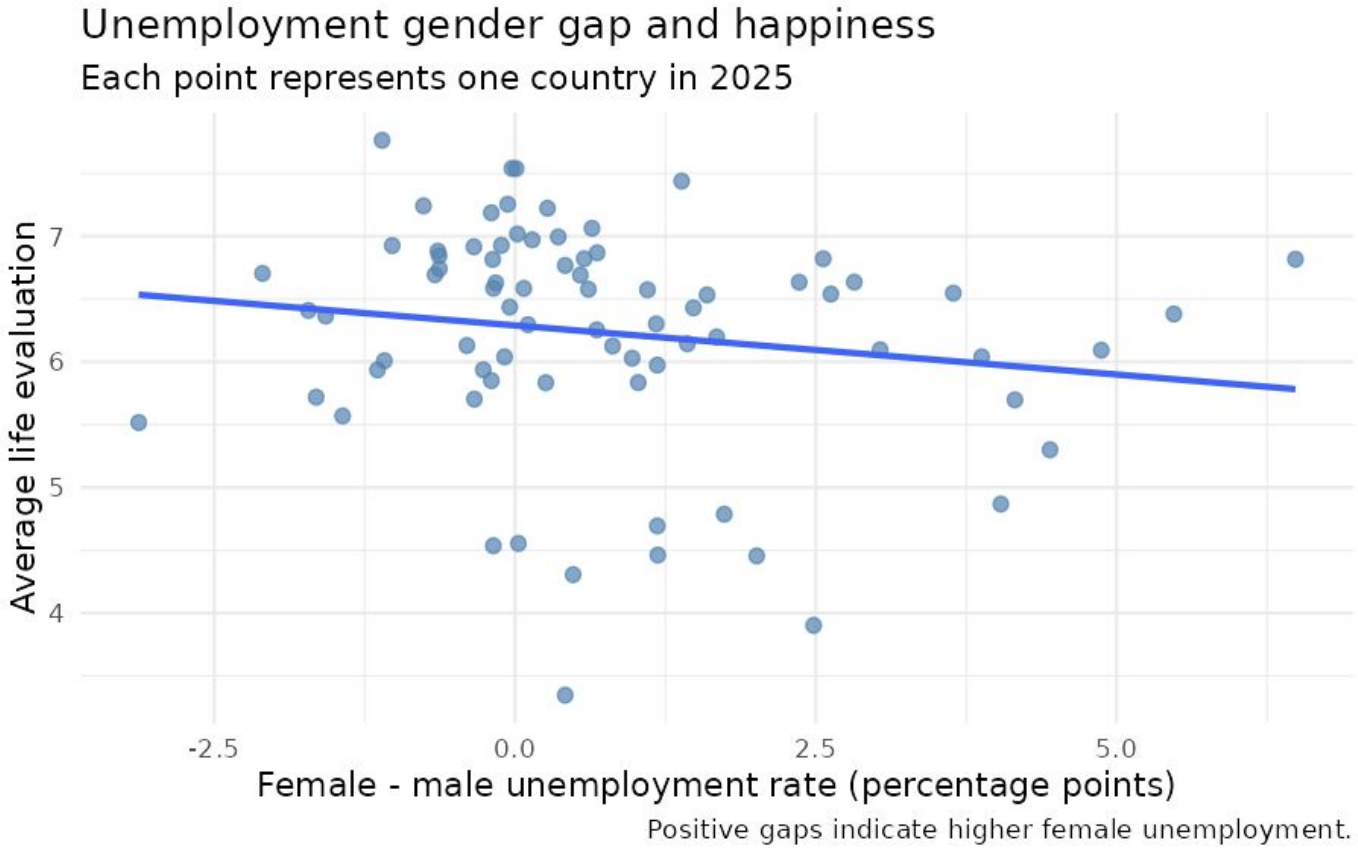


Key Takeaways

- In poorest countries, small increases in GDP are linked to large gains in life evaluation
- Countries with higher freedom tend to sit above the fitted curve

Implications

- Income influences poorest countries strongest
- Freedom levels may also explain life evaluation differences in similar income



Key Takeaways

- Unemployment gap is negatively correlated with average life evaluation.
- Larger female unemployment leads, predicts lower life evaluation

Implication

- Countries with larger unemployment gap, should expect a decrease in life evaluation

Conclusion and Discussion

What did we find?

- We found that, generally, there is a positive correlation between economic indicators and happiness metrics measured against life evaluation.

What were our limitations?

- Much of the happiness data in this study is self reported, leaving room for cultural bias, social norms, and other societal differences to influence the data reported.
- Large amounts of missing information for countries related to economic data like unemployment influences general trends alongside trends seen across wealth groups.

Future work?

- For continued analysis of this data, it would be crucial to examine the how the aforementioned cultural bias, social norms, and other societal differences sway reported happiness metrics to gain a deeper baseline understanding of these variables.