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Math 167R

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<div align="center">Factors of Happiness</div>

Main Research Question:

<div align="center">What are the largest influences on happiness in a population?</div>

Description of Dataset:

Firstly, I will be using the World Happiness Report which is a project that is made in collaboration with many research institutions including Gallup, the Oxford Wellbeing Research Centre, the U.N. Sustainable Development Solutions Network, and the WHR's Editorial Board.

I will also be using the datasets from Gallup and Meta on "The Global State of Social Connections" which surveyed people in countries around the world about how connected they feel to others and how lonely they feel.

The World Happiness Report dataset can be found at this link. Specifically, I will be using the report for 2022.

The Global State of Social Connections data can be found here. This data was also collected in 2022, which provides consistency for the data.

I chose these datasets because, recently, I have been contemplating the question of what makes me happy. It would be interesting to me to find out what makes people happy on a wider, population scale. If we can learn from the data about what makes people happy, and what makes them unhappy, then we will have a better idea as to what can be done to make people happier.

Data Dictionary:

Variable Name	Variable Type	Description
Rank	num	Country happiness ranking
Region	chr	Country's region in world
Country	chr	country

Happiness score	num	Happiness score
Explained by: GDP per capita	num	GDP per capita
Explained by: Social support	num	Social support score
Explained by: Healthy life expectancy	num	Projected number of healthy years
Explained by: Freedom to make life choices	num	Level of freedom for citizens of country
Explained by: Generosity	num	How many citizens of population give to charity
Explained by: Perceptions of corruption	num	Perceptions of corruption score
Very+Fairly (from loneliness dataset)	num	% of population that is very or fairly lonely
Very+Fairly (from connected dataset	num	% of population that is very or fairly connected

Sub-Questions:

1) Is it possible for a poor country to be happy? If so, what other happiness factors do they have that make up for their lack of economic development?

Are there countries that rank low on 'Explained by: GDP per capita' but still high on 'Happiness score'? If so, what other variables do they rank highly on compared to other countries, including the rich ones. If there is, I suspect that that country will rank highly in connectedness, generosity, social support, and healthy life expectancy.

2) What other factors lead to a higher 'healthy life expectancy'?

I hope to analyze what other factors are correlated with a higher 'healthy life expectancy' score.

3) Which countries or regions of the world are most socially connected? Which are the most lonely?

I plan to use 'region', 'country' and the connected and lonely datasets.

References for Background Research:
1) What makes a country happy?
   https://www.scientificamerican.com/article/what-makes-a-country-happy-its-complicated/
2) Why are the nordic countries so happy?
   https://worldhappiness.report/ed/2020/the-nordic-exceptionalism-what-explains-why-the-nordic-countries-are-constantly-among-the-happiest-in-the-world/
3) Young people in developed countries unhappy.
   https://www.reuters.com/article/idUSL19430195/