

05-assignment-QTM350-Report

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Introduction

This report analyzes data from the World Bank ([Bank 2022](#)) and used methods described by Wickham and Grolemund ([Wickham and Grolemund 2016](#)).

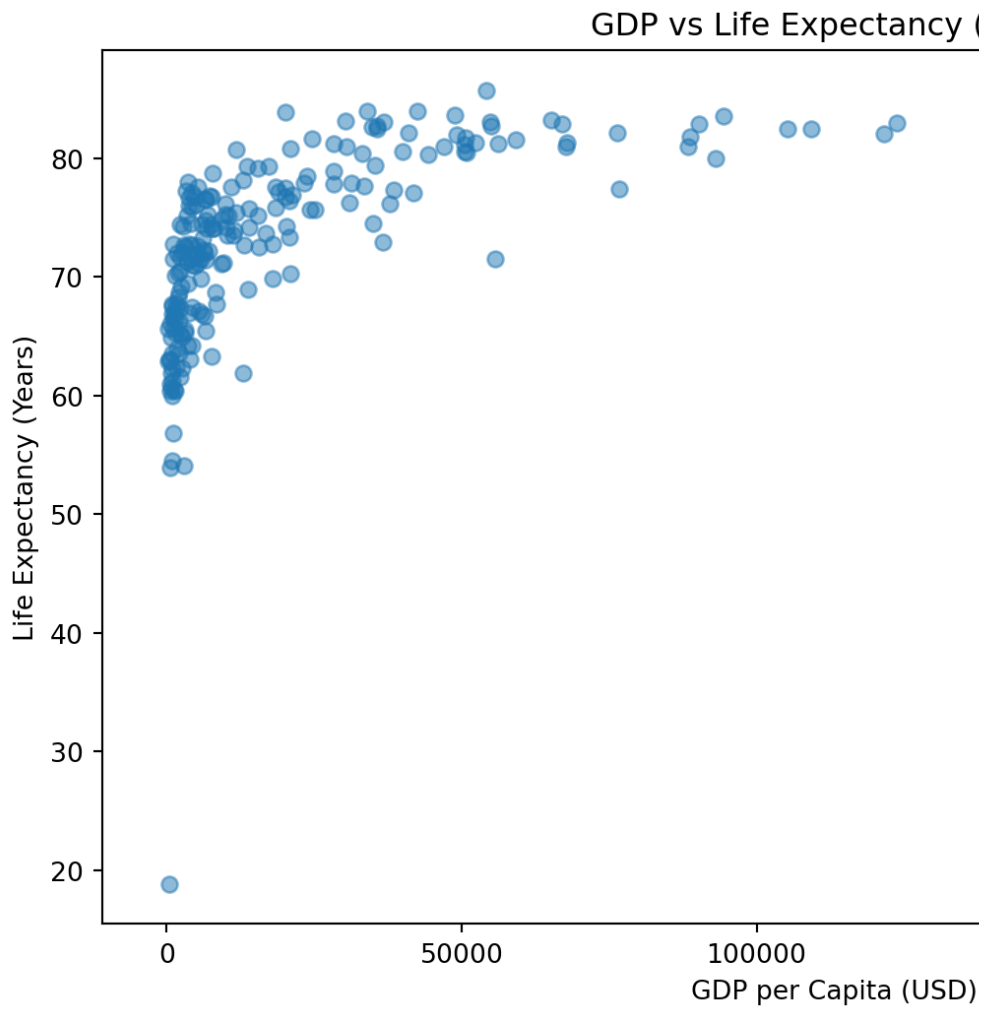
Data Analysis Table

```
import pandas as pd
df = pd.read_csv('wdi.csv')

table_stats = df[['gdp_per_capita', 'life_expectancy', 'unemployment_rate']]
table_stats
```

	gdp_per_capita	life_expectancy	unemployment_rate
count	209.000000	217.000000	186.000000
mean	21142.747417	73.108020	7.196930
std	31040.300784	7.942539	5.845956
min	302.992505	18.818000	0.130000
25%	2899.160475	67.788000	3.484750
50%	7655.594210	74.160976	5.337000
75%	28360.304147	78.531000	9.194500
max	226052.001905	85.746000	36.472000

```
gdp_per_capita is distributed around the mean of 21142.747 with
## Data Visualizations
```



(a) Relationship between GDP per Capita and Life Expectancy

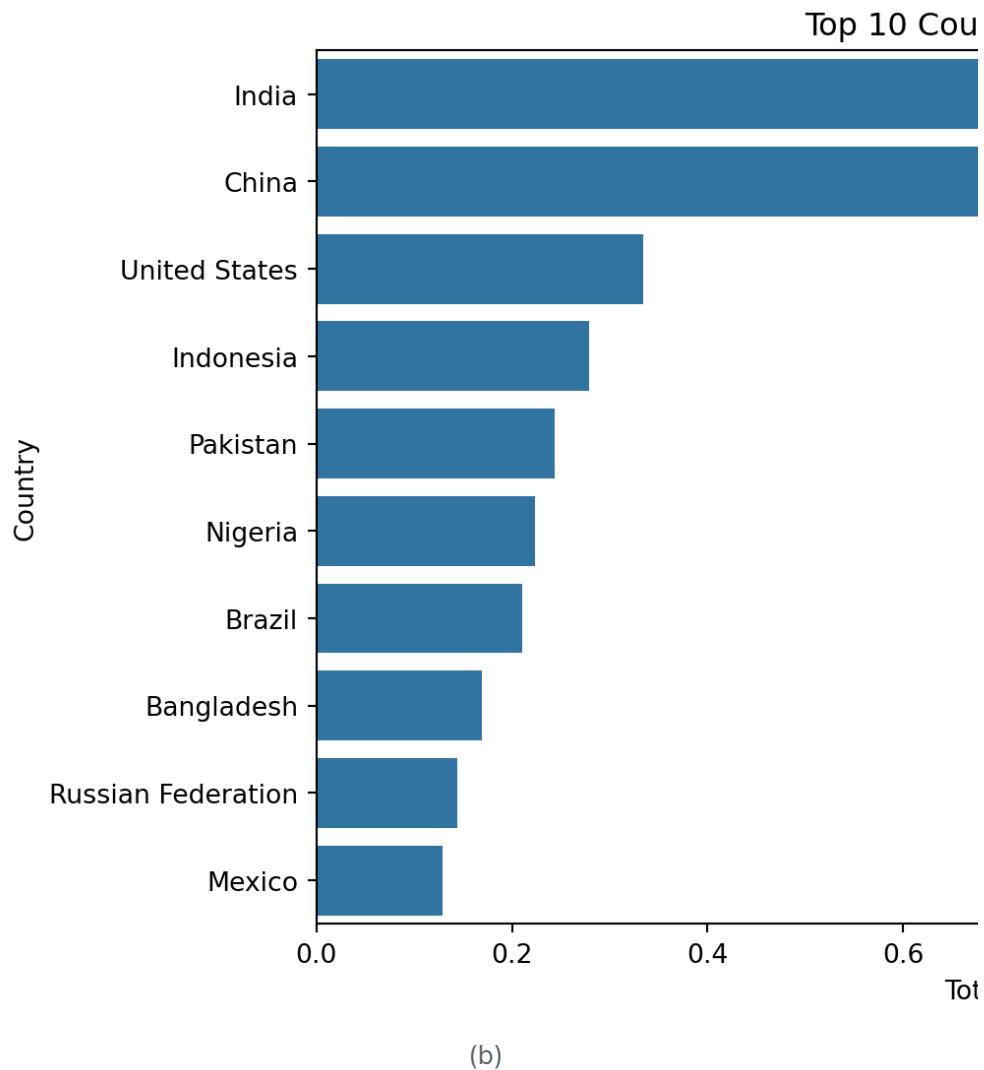


Figure 1

Conclusion

As illustrated in @fig-scatter-gdp-life, there is a positive trend between national wealth and health outcomes. Countries with higher GDP generally report higher life expectancy. The absolute value of the correlation coefficient is 0.85. The distribution of global population is highly concentrated. In the world, we can see that the top few countries (India and China) have significant

References

Bank, World. 2022. "World Development Indicators."

<https://databank.worldbank.org>.

Wickham, Hadley, and Garrett Grolemund. 2016. *R for Data Science*. O'Reilly Media.

