World Happiness Data Case Study (or Excel Assignment) 07-20-23

Name(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ M201 section \_\_\_\_\_

The 3rd UN Sustainable Development Goal is Good Health and Well-Being. The two dependent variables, we will examine are **Ladder Score (happiness)** and Healthy Life Expectancy.

Get to know the Data (Univariate Analysis):

1. What is the sample size? \_\_\_\_\_\_\_\_\_

Examine M, SD, skewness, and kurtosis of the two DVs (report 2 digits after the decimal)

Ladder Score Healthy Life Expectancy

2. Mean ­­­­­\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_

3. SD \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_

1. Skewness \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_
2. Kurtosis \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_

6. What country has the highest happiness score? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. What country has the lowest happiness score? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. What country has the longest healthy life expectancy? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. What country has the shortest healthy life expectancy? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. If highest = 1, what rank is the United States on happiness? \_\_\_\_\_\_\_\_\_\_\_\_

11. If highest = 1, what rank is the United States on healthy life expectancy? \_\_\_\_\_\_\_\_\_\_\_\_

Bivariate Analysis: Run six simple linear regressions to predict the ladder score and enter the Adj R2 and p-value in the corresponding row below (Q12 – Q17):

|  |  |  |
| --- | --- | --- |
|  | Adj R2 (round to .##) | p-value (report .###) |
| Logged GDP |  |  |
| Social support |  |  |
| Healthy life expectancy |  |  |
| Freedom |  |  |
| Generosity |  |  |
| Corruption |  |  |

Run six simple linear regressions to predict the ladder score and enter the Adj R2 and p-value in the corresponding row below (Q18 – Q23):

|  |  |  |
| --- | --- | --- |
|  | Adj R2 (round to .##) | p-value (report .###) |
| Ladder Score |  |  |
| Logged GDP |  |  |
| Social support |  |  |
| Freedom |  |  |
| Generosity |  |  |
| Corruption |  |  |

24. What is the strongest predictor of happiness? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

25. How many statistically significant predictors of happiness are there? \_\_\_\_\_\_\_\_\_

26. What is the strongest predictor of healthy life expectancy? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

27. How many statistically significant predictors of healthy life expectancy are there? \_\_\_\_\_\_\_\_\_

28. Is logged GDP more strongly related to? (circle one)

happiness or life expectancy

29. Write the regression equation for Social Support predicting Healthy Life Expectancy:

30. Use the regression equation above and the dataset to see how much the rank of US Life Expectancy would be, if social support in the US improved to the maximum (in the database) of .983.