**Scatter Graphs Assignment – World Happiness Report**

**Introduction**:

The World Happiness Report (2018) is a survey of global happiness that ranks 156 countries by their happiness levels. There are 6 key variables that support well-being: income, healthy life expectancy, social support, freedom, trust and generosity.

We are going to create scatter graphs to see if happiness can be best explained by looking at:

* Income
* Healthy Life Expectancy
* Freedom to Make Life Choices
* Social Support

|  |  |  |
| --- | --- | --- |
| **Indicator** | **Unit of Measurement** | **Explanation** |
| **Income** | measured as GDP per person | This means the total amount of money made by citizens in the country, divided by the number of citizens in the country – how much each person would make if averaged |
| **Healthy Life Expectancy** | measured in years | This is how long people are expected to live |
| **Freedom to Make Life Choices** | measured on a scale of 0 – 1 | This means the freedom to make decisions without too much restriction set out by the government or people of power |
| **Social Support** | measured on a scale of 0-1 | This takes into account how strong and important the social relationships with friends and family are. |

**Goal**: Determine which indicators of well-being have a stronger influence on happiness.

**Hypothesis:**

Which indicator(s) do you feel will have a strong correlation with happiness (meaning it has a strong influence on a person’s happiness)? Please explain why you feel this way.

Which indicator(s) do you feel will have a weaker correlation with happiness (meaning it doesn’t really influence the happiness of people in a country)?

**Results:**

In the spaces below, copy and paste your scatter graphs that you created in the Excel File.

*Be sure to have all of your axis labelled and a proper title on each graph.*

**Observations:**

Fill in the chart below with your observations from each of your scatter graphs.

|  |  |  |
| --- | --- | --- |
| **Scatter Graph Indicators** | **Type of Correlation** | **Your Reasoning Why** |
| Happiness & Money |  |  |
| Happiness & Life Expectancy |  |  |
| Happiness & Freedom |  |  |
| Happiness & Social Support |  |  |

**Discussion:**

Based off of your scatter graphs, which indicators appear to have a strong correlation with happiness?

Based off of your scatter graphs, which indicators appear to have a weak correlation with happiness?

Based off of your scatter graphs, which indicators appear to have little to no correlation with happiness?