**Exemplar Data Exercise**

**Thoughts**

- An excel dataset of real HBSC data is available from [shrn@cardiff.ac.uk](mailto:shrn@cardiff.ac.uk)

- Data must be of interest and relevance to school children. Nothing too sensitive however.

- Encourage use of excel tools such as pivot and chart.

- Encourage ‘no wrong answers’ approach to data analysis.

- Encourage group working (teams of 4 people to complete the exercise?).

- Should be delivered via branded paper with SHRN logo to link with task with ongoing SHRN work.

- Perhaps write something up (authored by SHRN Team or school children?) for the SHRN website?

1. **Data File:**

There is an excel file containing 482 records (including a header) and the following variables. This file will support the analysis you are about to do.

|  |  |
| --- | --- |
|  | **Variable** |
| **1** | School ID |
| **2** | Gender |
| **3** | Eat Fruits |
| **4** | Eat Vegetables |
| **5** | Eat Sweets |
| **6** | Breakfast Weekdays |
| **7** | Breakfast Weekends |
| **8** | Tooth Brushing |
| **9** | Academic Achievement |
| **10** | Liking School |
| **11** | Time To Travel To School |
| **12** | Wake Up On School Mornings |
| **13** | Wake Up At Weekends / During Holidays |
| **14** | How well off do you think your family is |
| **15** | Talk to father |
| **16** | Talk to mother |
| **17** | Using email |
| **18** | Using instant messaging |

This data is real data collected from children and schools that have filled in the ‘Health Behaviour in School-aged Children Study in Wales’ survey. The data is confidential and anonymous and relates to schools similar to yours and is a subset of the actual data captured.

1. **Definitions:**

**Data**:

*“Information, especially facts or numbers, collected to be examined and considered and used to help decision making, or information in an electronic form that can be stored and used by a computer.”*

**Conclusion**:

*“A reasoned deduction or inference.”*

**Analysis**:

*“Process as a method of studying the nature of something or of determining its essential features and their relations.”*

**Correlation**:

*“A connection or relationship between two or more facts, numbers etc.”*

1. **Task:**
2. The above-mentioned excel file of data is given to children.
3. Instruction:

*“Take some time to look at the data in Excel. Use pivots and graphs to bring the data to life. Turn the list of records into something with meaning and narrative. Find something that interests you in the data and analyse it. “*

1. Instruction:

*“Based on your analysis, write up 3 conclusions you have reached as a result of this analysis.*

* 1. *A*
  2. *B*
  3. *C*

1. Instruction:

*“Looking at the 12 variables in the data file, do you think there is a correlation or link between any of the variables or are all the variables independent of one another? Explain how you reached your conclusion.”*

1. Instruction:

*“You have now completed some analysis of the data. What data (not present in the file you have looked at) do you think would be useful and would help provide more insight? List as many data as you think useful. Explain how you reached your conclusion.”*

1. Instruction:

*Complete this sentence: “The one thing I learnt from looking at the school data is…”.*

1. *Thank you!!! The task is complete.*