## Activity 1.4 – Practice with Data Management in Prep

**Observational Units:** nursing faculty (one per rows).

**Summary:**

The goal of this study is to determine to what extent secondary traumatic stress levels (stress induced by exposure to student trauma) are associated with functional impairment.

**Variables:**

* *Participant ID.* You will need to add a key to each row to identify the participant.
* *Numeric Scale.* The raw data involve two types of responses which need to be converted to a numeric scale. In both cases, we want to score to increase with frequency by 1 unit each step, with the least frequent label coded as 1 and the most frequent as 5.
  + ForQ41\_1 through Q41\_17, we will score *Never* as 1, up to *Very Often as 5.*
  + ForQ39\_1 through Q39\_7, we will score *None* as 1, up to *A Great Deal as 5.*
* *Secondary Traumatic Score* is the aggregated total numeric score of columns Q41\_1 through Q41\_17 for each participant.
* *Secondary Traumatic Stress Scale (STSS)* is ordinal variable determined using the Secondary Traumatic Score using the following table. This is the explanatory variable.

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Description automatically generated

* *Functional Impairment* is the aggregated total numeric score for columns Q39\_1 through Q39\_7 and represents the response variable.

**Outcome:**

|  |  |
| --- | --- |
| ***STS Scale*** | ***Mean Functional Impairment Score*** |
| Little or NO STS | 7.99 |
| Mild STS | 10.61 |
| Moderate STS | 12.20 |
| High STS | 16.86 |
| Severe STS | 18.85 |

The mean functional impairment differs roughly by 2.00 points for each STS Scale. However, there is a bigger change (4.66 points) in the mean functional impairment between Moderate STS and High STS *(Appendix #1).*

**Appendix:**

**#1 – Box Plot**

A graph of a number of dots

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#2 – Final Table (first 10 rows)

A screenshot of a computer

Description automatically generated