Kruskal-Wallis analysis: Non-parametric equivalent to a 1-way Anova. A solution to violations of parametric assumptions. A test used on >2 independent groups.

Hypothesis: An important part of this method is that the final assumptions are dependent upon testing for equality or non-equality of distributions for the categories involved. Equal distributions met-Null: The medians of the categories are equal; Equal distributions NOT met-Null: The mean ranks are equal

Dunn’s Comparison: Pairwise comparison between groups to find significance in difference and get further insight into the concern being investigated.

Kruskal-Wallis H: Is the statistic used in the K-W test. It is also the statistic used in comparing the similarity of distributions between categories.

*N = # of observations*

*g = number of groups*

,

Shapiro-Wilk (S-W) test: The null states normality and so a p < 0.001 is expected in the K-W test.

Kolmogorov-Smirnov: The null states normality and so a p < 0.001 is expected in the K-W test.

Lavene’s test: The null states equality of variance and so a p < 0.001 is expected in the K-W test.

SPSS Visual of K-W:

