

## Connection between measurement scales and analytical processes

This table conveys in column 2 what analytical tools could be used when the data is of the level of measurement listed to the left. This table does NOT convey information about what the level of measurement is for the statistics in the 2nd column. For example, ranks associated with percentiles are NOT interval scaled data.

Type of Data	Statistics & PASW/SPSS procedures
Categorical	Percentages: Frequencies (frequency distribution table) Crossed Percentages: Crosstabs Bar Charts - whole group: Graphs-Legacy-bar-simple Bar Charts - sub groups: Graphs-Legacy-bar-clustered Correlation (x and y dichotomous variables): Crosstabs-stats (Phi) Correlation (x and y categorical (more than 2 categories): Crosstabs-stats (Cramer's V)
Ordinal	Percentages: Frequencies (frequency distribution table) Crossed Percentages: Crosstabs Bar Charts - whole group: Graphs-Legacy-bar-simple Bar Charts - sub groups: Graphs-Legacy-bar-clustered Correlation (x and y ordinal): Correlate (Kendall)
Interval	Central Tendency - whole group: Frequencies-stats Central Tendency - sub-groups: compare means Variability - whole group: Frequencies-stats Variability - sub-groups: compare means Percentiles: Frequencies-stats Percentile Ranks: Frequencies Histogram-whole group: Graphs-Legacy-Histogram Histogram-sub groups: Graphs-Legacy-Histogram Correlation (x and y continuous): Correlate (PPMC) z score: Descriptives Scatterplot: Graphs-legacy-Scatter/Dot
Ratio	Central Tendency - whole group: Frequencies-stats Central Tendency - sub-groups: compare means Variability - whole group: Frequencies-stats Variability - sub-groups: compare means Percentiles: Frequencies-stats Percentile Ranks: Frequencies Histogram-whole group: Graphs-Legacy-Histogram Histogram-sub groups: Graphs-Legacy-Histogram Correlation (x and y continuous): Correlate (PPMC) z score: Descriptives Scatterplot: Graphs-legacy-Scatter/Dot