Choosing Statistical Analyses Decision Tree

Level of measurement of the DV?
- Nominal or Ordinal
- Interval or Ratio

Are IVs/Predictors Categorical or Continuous?
- Categorical
- Continuous (or combination)

Analysis of Frequencies (Nominal): Chi-Square, Phi Coefficient
Analysis of Ranks (Ordinal): Wilcoxon*, Mann-Whitney*, Kruskal-Wallis*, Friedman ANOVA*

Correlation-Based Analyses:
- Pearson
- Bivariate Regression
- Multiple Regression

Means Comparisons:
- Independent t-test
- Dependent t-test
- ANOVAs

Correlation-Based Analyses:
- Spearman Correlation
- Logistic Regression*

Non-Parametric Analyses

Parametric Analyses

Note. To choose among the various analyses listed in the bottom level (yellow boxes), you will need to determine (a) how many independent variables/predictors (and levels of each) are involved, and (b) whether each independent variable/predictor is a between subjects or within subjects variable.

* Analyses marked with an asterisk are included only as a reference. These analyses are typically not covered in our curriculum.