Choosing the best test…..

Is my DV…

categorical

- Chi-squared goodness of fit, if 1 variable
- Chi-squared cross tabulation (or Fisher's exact probability test if Chi-squared assumptions are not met) if >1 variable

interval

What am I looking for?

Relationships

What type of relationship?

Simple

Pearson's R or Spearman's Rho

Predictive

How many predictors?

1

Simple linear regression

>1

Multiple linear regression

Differences

How many DVs?

>1

MANOVA

1

How many IVs?

1

Independent groups /repeated conditions?

Groups

No of IV levels?

2

Independent t-test OR Mann Whitney U

>2

1-way independent ANOVA OR Kruskal Wallis

Conditions

No of IV levels?

2

Repeated t-test OR Wilcoxon signed ranks

>2

1-way repeated ANOVA OR Friedman

>1

Independent groups /repeated conditions?

Groups

Independent (*number of IVs*) ANOVA

Conditions

Repeated (*number of IVs*) ANOVA

Both

Mixed (*number of IVs*) ANOVA

IF p <.05 → MULTIPLE COMPARISON POST-HOC TESTS