

PARAMETRIC STATISTICAL ANALYSES

(AS GABBY SEES IT)

Predict Values

Compares Means

Examine Relationships
(Counts)

Continuous Response Variable
Continuous Explanatory Variable

Continuous Response Variable
Categorical Explanatory Variable

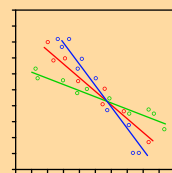
Continuous Response Variable
Binary Explanatory Variable

Categorical Response Variable
Categorical Explanatory Variable

Linear Regression



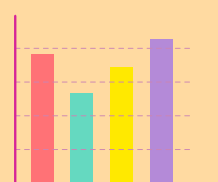
ANCOVA



ANOVA

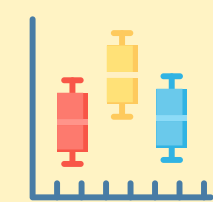
T-Test

Chi-Square



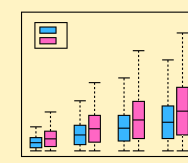
One-Way

1 Factor (IV)
> 2 Levels



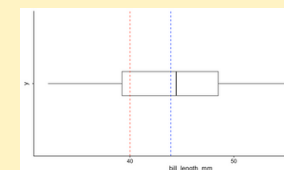
Two-Way

Compares Interaction
2 Factors (IV)
> 2 Levels



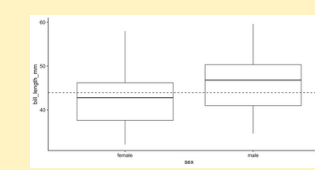
One Sample

Is the mean of a sample
different to the mean of
another



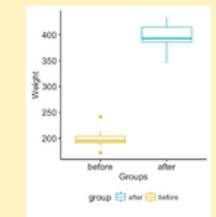
Two Sample

Are the means of two
groups different from
each other



Paired

mean difference of two
related measures



Fixed Factors

General Linear Model (GLM)

General Linear Mixed Model (GLMM)

Generalised Linear Mixed Model

Random Factors

(with covariance structure)

e.g. repeated measures, split-plot, blocked designs

Specify Distribution and Link Function

(does NOT need to be normal)

Fits the correct distribution to data via a link function
Avoids need for transformations