ggstatsplot: : CHEAT SHEET

INTRODUCTION

'ggstatsplot' creates graphics with details from statistical tests included in the plots themselves. It generates **information-rich plots** for statistical analysis of continuous or categorical data.

FUNCTION	GRAPH
ggbetweenstats	violin plot
ggwithinstats	violin plot
gghistostats	histogram
ggdotplotstats	dot plot
ggscatterstats	scatterplot
ggcorrmat	correlation matrices
ggpiestats	pie chart
ggbarstats	bar chart
ggcoefstats	dot & whisker plot

Currently, it supports some most common types of statistical tests: **parametric**, **nonparametric**, **robust**, and **Bayesian** versions of **t-test/ANOVA**, **correlation analyses**, **contingency** table analysis, meta-analysis, and regression analyses.

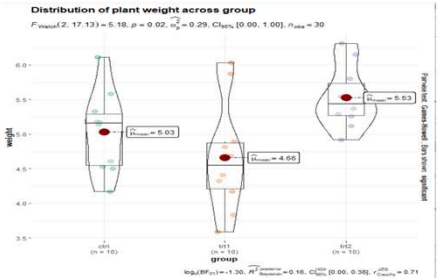
PARAMETER

PARAMETER	CONTENT
type	The type of statistical approach: • "parametric", • "nonparametric", • "robust", • "bayes"
Pairwise.display	Which pairwise comparisons to display: • "significant", • "non-significant", • "all"
p.adjust.method	Adjustment method for p-value for multiple comparisons: • "holm", • "hochberg", • "hommel", • "bonferroni", • "BH", • "BY", • "fdr", • "none"
conf.level	Scalar between 0 and 1. • Default=0.95
sig.level	Significance level • Default=0.05

FUNCTIONS

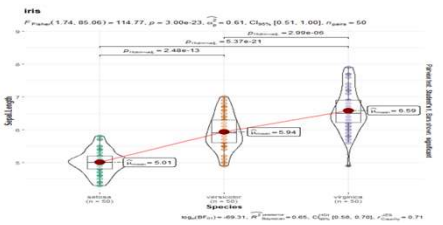
➢ ggbetweenstats ( )

```
ggbetweenstats( data  = PlantGrowth,
  x     = group, y     = weight,  plot.type =
"boxviolin")
```



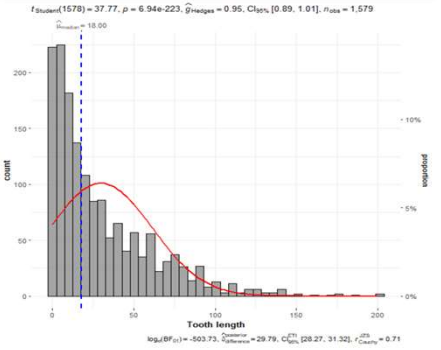
➢ ggwithinstats ( )

```
ggwithinstats( data = iris,
  x = Species, y = Sepal.Length,
  sort = "descending",  sort.fun = median,
  pairwise.comparisons = TRUE, title = "iris")
```



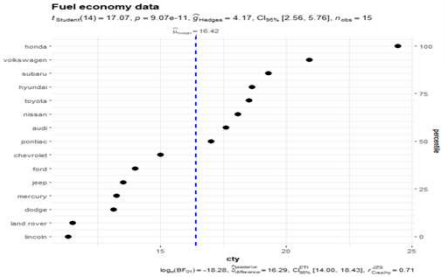
➢ gghistostats ( )

```
gghistostats( data = movies_long, x = budget,
  normal.curve = TRUE, normal.curve.args =
list(color = "red", size = 1) )
```



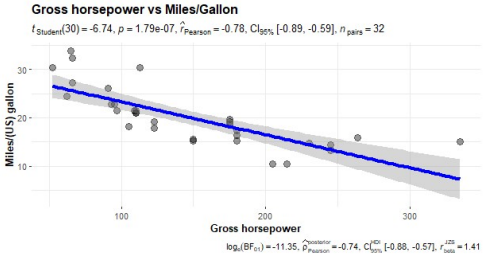
➢ ggdotplotstats ( )

```
ggdotplotstats( data = ggplot2::mpg, x = cty, y =
manufacturer, title = "Fuel economy data")
```



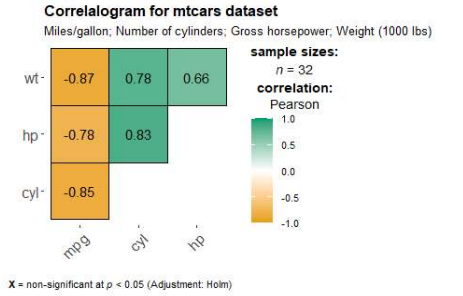
➢ ggscatterstats ( )

```
ggscatterstats( data = mtcars, x = hp, y = mpg,
xlab = "Gross horsepower", ylab = "Miles/(US)
gallon", title = "Relationship between Gross
horsepower and Miles/Gallon", marginal =FALSE)
```



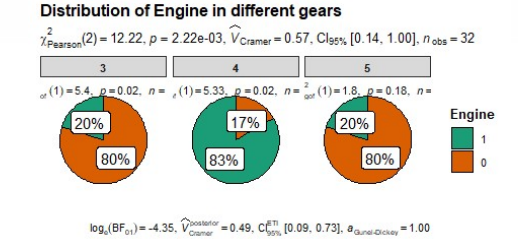
➢ ggcorrmat ( )

```
ggcorrmat( data  = mtcars, cor.vars =
c(mpg,cyl,hp,wt), title   = "Correlalogram for
mtcars dataset",
 subtitle = "Miles/gallon; Number of cylinders;
Gross horsepower; Weight (1000 lbs)")
```



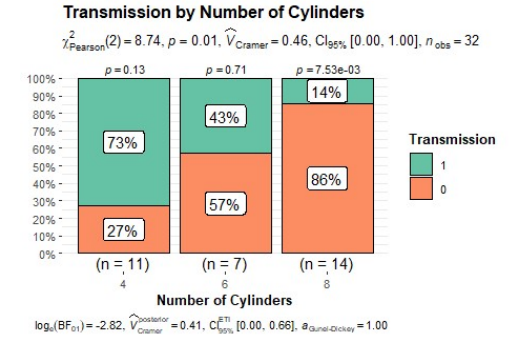
➢ ggpiestats ( )

```
ggpiestats( data   = mtcars, x  = vs, y  = gear,
  title      = "Distribution of Engine in different gears",
legend.title = "Engine" )
```



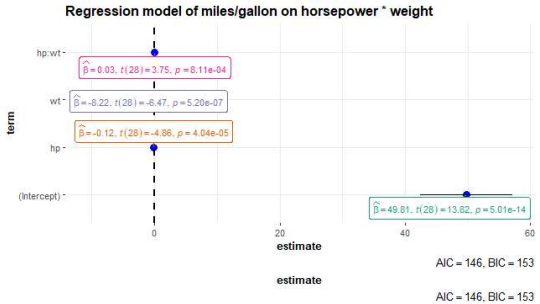
➢ ggbarstats ( )

```
ggbarstats( data = mtcars, x    = am, y  = cyl,
  title = "Transmission by Number of Cylinders",
  xlab = "Number of Cylinders", legend.title =
"Transmission", palette = "Set2" )
```



➢ ggcoefstats ( )

```
mod <- stats::lm(formula = mpg ~ hp * wt, data = mtcars)
ggcoefstats( x = mod, title = "Regression model of
miles/gallon on horsepower * weight" )
```



Reference : https://cran.r-project.org/web/packages/ggstatsplot/ggstatsplot.pdf