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.

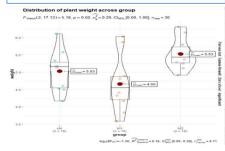
PARAMFTFR

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

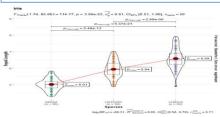
ggbetweenstats ()

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



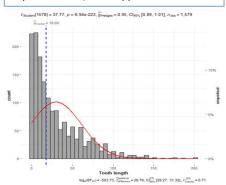
ggwithinstats ()

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



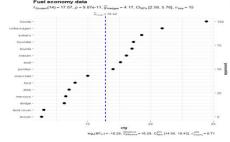
gghistostats ()

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



ggdotplotstats ()

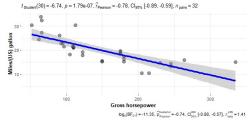
ggdotplotstats(data = ggplot2::mpg, x = cty, y = manufacturer, title = "Fuel economy data")



ggscatterstats ()

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

Gross horsepower vs Miles/Gallon



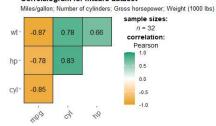
ggcorrmat ()

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)")

Correlatogram for mtcars dataset

X = non-significant at p < 0.05 (Adjustment: Holm)

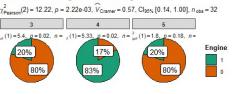


ggpiestats ()

R Studio

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

Distribution of Engine in different gears

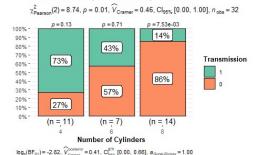


 $log_o(BF_{01}) = -4.35$, $\widehat{V}_{Course}^{loosterior} = 0.49$, $C_{losso}^{(ET)}$ [0.09, 0.73], $a_{Gunol-Dickey} = 1.00$

ggbarstats ()

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

Transmission by Number of Cylinders



ggcoefstats ()

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



