Package 'plotrr'

May 9, 2026

Type Package

Title Making Visual Exploratory Data Analysis with Nested Data Easier

Version 1.0.2

Description Provides tools for visual exploratory data analysis with nested data. Includes functions for creating bivariate plots, dot plots, histograms, and violin plots for each group or unit in nested data. Methods are described in Crabtree and Nelson (2017) ``Plotrr: Functions for making visual exploratory data analysis with nested data easier'' <doi:10.21105/joss.00190>.

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Encoding UTF-8

Imports ggplot2

RoxygenNote 7.3.3

Suggests knitr, rmarkdown

VignetteBuilder knitr

URL https://github.com/lobsterbush/plotrr

BugReports https://github.com/lobsterbush/plotrr/issues

NeedsCompilation no

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Repository CRAN

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Contents

`bivarplots` *Plots the bivariate relationship between two measures for each group/unit*

Description

Returns a plot of the bivariate relationship between two measures for each group/unit.

Usage

```
bivarplots(x, y, group, data)
```

Arguments

`x`	A vector.
`y`	A vector.
`group`	A vector.
`data`	A data frame.

Value

A series of figures that plot the bivariate relationship between two measures for each group/unit.

Author(s)

Charles Crabtree <charles.crabtree@monash.edu>

Examples

```
a <- runif(1000, min = 0, max = 1)
b <- a + rnorm(1000, mean = 0, sd = 1)
c <- rep(c(1:10), times = 100)
data <- data.frame(a, b, c)
bivarplots("a", "b", "c", data)
```

bivarrugplot — *Plots the bivariate relationship between two measures and a rugplot for each measure*

Description

Returns a plot of the bivariate relationship between two measures with a rugplot for each measure.

Usage

```
bivarrugplot(x, y, data)
```

Arguments

x	A vector.
y	A vector.
data	A data frame.

Value

A plot of the bivariate relationship between two measures with a rugplot for each measure.

Author(s)

Charles Crabtree <charles.crabtree@monash.edu>

Examples

```
a <- runif(1000, min = 0, max = 1)
b <- a + rnorm(1000, mean = 0, sd = 1)
data <- data.frame(a, b)
bivarrugplot("a", "b", data)
```

clear — *(Effectively) clears R terminal*

Description

Effectively clears the R terminal by filling it with whitespace.

Usage

```
clear(...)
```

Arguments

...	An unused argument.

Value

No return value (called for side effect of printing a form feed character to the console, which visually clears the R terminal). Returns `NULL` invisibly.

Author(s)

Charles Crabtree <charles.crabtree@monash.edu>

Examples

```
clear()
```

`dotplots` *Creates histograms for a measure for each group/unit*

Description

Returns histograms for a measure for each group/unit.

Usage

```
dotplots(x, y, group, data, n)
```

Arguments

`x`	A vector.
`y`	A vector.
`group`	A vector that contains unit/group identifiers.
`data`	A data frame.
`n`	The number of bins. Some experimentation with this number might be necessary.

Value

Historgrams for a measure for each group/unit.

Author(s)

Charles Crabtree <charles.crabtree@monash.edu>

Examples

```
a <- runif(1000, min = 0, max = 1)
b <- a + rnorm(1000, mean = 0, sd = 1)
c <- rep(c(1:10), times = 100)
data <- data.frame(a, b, c)
dotplots("a", "b", "c", data, 20)
```

histplots *Creates histograms for a measure for each group/unit*

Description

Returns histograms for a measure for each group/unit.

Usage

```
histplots(x, y, group, data, n)
```

Arguments

x	A vector.
y	A vector.
group	A vector that contains unit/group identifiers.
data	A data frame.
n	The number of bins.

Value

Historgrams for a measure for each group/unit.

Author(s)

Charles Crabtree <charles.crabtree@monash.edu>

Examples

```
a <- runif(1000, min = 0, max = 1)
b <- a + rnorm(1000, mean = 0, sd = 1)
c <- rep(c(1:10), times = 100)
data <- data.frame(a, b, c)
histplots("a", "b", "c", data, 5)
```

lengthunique *Calculates the number of unique values in a vector*

Description

Calculates the number of unique values in a vector.

Usage

```
lengthunique(x)
```

Arguments

x	A vector.

Value

The number of unique values in a vector.

Author(s)

Charles Crabtree <charles.crabtree@monash.edu>

Examples

```
x <- rep(c(1:10), 10)
lengthunique(x)
```

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makefacnum *Converts factor vectors to numeric vectors*

Description

Converts factor vectors to numeric vectors.

Usage

```
makefacnum(x)
```

Arguments

x	A vector.

Value

A numeric vector.

Author(s)

Charles Crabtree <charles.crabtree@monash.edu>

Examples

```
x <- c("1", "2", "3")
x <- as.factor(x)
x
x <- makefacnum(x)
x
is.numeric(x)
```

`violinplots` *Creates violin plots for the relationship between two measures for each group/unit*

Description

Returns violin plots for the relationship between two measures for each group/unit.

Usage

```
violinplots(x, y, group, data)
```

Arguments

`x`	A vector.
`y`	A vector.
`group`	A vector that contains unit/group identifiers.
`data`	A data frame.

Value

Violin plots for the relationship between two measures for each group/unit.

Author(s)

Charles Crabtree <charles.crabtree@monash.edu>

Examples

```
a <- runif(1000, min = 0, max = 1)
b <- a + rnorm(1000, mean = 0, sd = 1)
c <- rep(c(1:10), times = 100)
data <- data.frame(a, b, c)
violinplots("a", "b", "c", data)
```

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