

Package ‘ggcorset’

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Type Package

Title The Corset Plot

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Description Corset plots are a new visualization technique, which are used strictly to visualize repeat measures at 2 time points (such as pre- and post- data). The distribution of measurements at each time point are visualized using half violins, whilst the trajectories of individual change are visualized via spaghetti plots by connecting these two points linearly. These lines can be coloured to represent percent change or other user-defined value. This method of visualization is ideal for showing the heterogeneity of data, including differences by sub-groups. The package relies on 'ggplot2' allowing for easy integration so that users can customize their visualizations as required. Users can create corset plots using data in either wide or long format using the functions `gg_corset()` or `gg_corset_elongated()`, respectively.

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Depends R (>= 3.5.0)

Imports ggplot2, dplyr, ggghalves, ggstance

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LazyData true

RoxygenNote 7.1.1

NeedsCompilation no

Repository CRAN

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 drinkdays

DRINKDAYS

Description

An example data set from simulated data.

Usage

```
data(drinkdays)
```

Format

An object of class `data.frame` with 300 rows and 3 columns.

Examples

```
## Not run:
data(drinkdays)

## End(Not run)
```

 gg_corset

CORSET PLOT

Description

This function visualizes a corset plot in wide format.

Arguments

<code>data</code>	The name of the data frame.
<code>y_var1</code>	The name of measured variable at time 1.
<code>y_var2</code>	The name of measured variable at time 2.
<code>group</code>	The name of units measured at each time point such as 'ID'.
<code>c_var</code>	The name of variable to visualize by line colour, such as percent change.
<code>vio_fill</code>	Optional (defaults to a soft black). Use to change the fill colour of the half violins.
<code>line_size</code>	Optional. Use to change the size (thickness) of the lines which visualize the <code>c_var</code> .

Value

ggplot2 graphical object

Examples

```
wide.df <- data.frame(id = c(1,2,3,4,5),
  time1 = c(3,4,7,5,6),
  time2 = c(5,5,7,3,0),
  change = c(28.57,14.29,0,-28.57,-85.71))
gg_corset(data = wide.df, y_var1 = "time1",
  y_var2 = "time2", group = "id", c_var = "change")
```

gg_corset_elongated *CORSET PLOT*

Description

This function visualizes a corset plot in long format.

Usage

```
gg_corset_elongated(
  data,
  x_var,
  x_vals,
  y_var,
  group,
  c_var,
  vio_fill = NA,
  line_size = NA
)
```

Arguments

data	The name of the data frame.
x_var	The name of the x_axis variable.
x_vals	The values of the two time points.
y_var	The repeated measure variable name.
group	The name of units measured at each time point such as 'ID'.
c_var	The name of variable to visualize by line colour, such as percent change.
vio_fill	Optional (defaults to a soft black). Use to change the fill colour of the half violins.
line_size	Optional. Use to change the size (thickness) of the lines which visualize the c_var.

Value

ggplot2 graphical object

Examples

```
long.df <- data.frame(time = c("pre", "post", "pre", "post", "pre", "post"),
  days = c(3, 5, 4, 0, 7, 7),
  change = c(28.57, 28.57, -57.14, -57.14, 0, 0),
  id = c(1, 1, 2, 2, 3, 3))
gg_corset_elongated(data = long.df, x_var = "time",
  x_vals = c("pre", "post"), y_var = "days",
  group = "id", c_var = "change")
```

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