Package: rotatogram (via r-universe)

September 9, 2024

Title A Non-Axis-Dominant Association Plotting Tool

Version 0.2.1

Description A rotatogram is a method of displaying an association
which is axis non-dominant. This is achieved in two ways:
First, the method of estimating the slope and intercept uses
the least-products method rather than more typical least
squared error for the ``dependent'' variable. The least products
method has no ``dependent'' variable and is scale independent.
Second, the plot is rotated such that the resulting regression
line is vertical, reducing the suggestion that the vertical
axis is the dominant one. The slope can be read relative to
either axis equally.

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Encoding UTF-8

Roxygen list(markdown = TRUE)

Imports ggplot2,stats,grid

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Repository https://noahhaber.r-universe.dev

RemoteUrl https://github.com/noahhaber/rotatogram

RemoteRef HEAD

RemoteSha 88f75e2819cbf1887a1bd955e253db6456423109

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Description

A rotatogram is a method of displaying an association which is axis non-dominant. This is achieved in two ways: First, the method of estimating the slope and intercept uses the least-products method rather than more typical least squared error for the "dependent" variable. The least products method has no "dependent" variable and is scale independent. Second, the plot is rotated such that the resulting regression line is vertical, reducing the suggestion that the vertical axis is the dominant one. The slope can be read relative to either axis equally.

Usage

```
rotatogram(
  x1,
  x2,
  x1.label = "X1",
  x2.label = "X2",
  error.bootstrap = FALSE,
  error.bootstrap.iterations = 500,
  suppress.plot = FALSE,
  return.values = FALSE
)
```

Arguments

x1	(required) A vector containing the data for the x1 variable
x2	(required) A vector containing the data for the x2 variable
x1.label	(optional) Changes the x1 axis label to the specified name
x2.label	(optional) Changes the x2 axis label to the specified name
error.bootstrap	
	(optional) Generates and displays bootstrapped errors to enable confidence bands, standard errors, and confidence intervals
error.bootstrap.iterations	
	(optional) Sets number of iterations for which to run bootstrap
suppress.plot	(optional) Suppresses the plot output
return.values	(optional) Exports the stored data for later access (e.g. slope and intercept calculated)

Value

description The resulting object contains the resulting intercept ($intercept), slope/beta ($beta), the slope in degrees ($slope.degrees)

Examples

```
# Output a rotatogram using the iris dataset
rotatogram(iris$Sepal.Length,iris$Petal.Length,x1.label="Sepal length",x2.label="Petal length")
```

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