Package 'lavaanPlot'

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Type Package

Title Path Diagrams for 'Lavaan' Models via 'DiagrammeR'

Version 0.6.2

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URL https://github.com/alishinski/lavaanPlot

Description Plots path diagrams from models in 'lavaan' using the plotting
functionality from the 'DiagrammeR' package. 'DiagrammeR' provides nice path diagrams
via 'Graphviz', and these functions make it easy to generate these diagrams from a
'lavaan' path model without having to write the DOT language graph specification.

License GPL (>= 2)

Encoding UTF-8

Imports lavaan, DiagrammeR, stringr, magrittr

RoxygenNote 7.1.1

Suggests knitr, rmarkdown, DiagrammeRsvg, rsvg, png

VignetteBuilder knitr

NeedsCompilation no

Repository CRAN

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R topics documented:

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buildCall	*Builds the Diagrammer function call.*

Description

Builds the Diagrammer function call.

Usage

```
buildCall(
  name = name,
  model = model,
  labels = labels,
  graph_options = list(overlap = "true", fontsize = "10"),
  node_options = list(shape = "box"),
  edge_options = list(color = "black"),
  ...
)
```

Arguments

`name`	A string of the name of the plot.
`model`	A model fit object of class lavaan.
`labels`	An optional named list of variable labels fit object of class lavaan.
`graph_options`	A named list of graph options for Diagrammer syntax.
`node_options`	A named list of node options for Diagrammer syntax.
`edge_options`	A named list of edge options for Diagrammer syntax.
`...`	additional arguments to be passed to `buildPaths`

Value

A string specifying the path diagram for `model`

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buildLabels	*Adds variable labels to the Diagrammer plot function call.*

Description

Adds variable labels to the Diagrammer plot function call.

Usage

```
buildLabels(label_list)
```

Arguments

label_list   A named list of variable labels.

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buildPaths   *Extracts the paths from the lavaan model.*

Description

Extracts the paths from the lavaan model.

Usage

```
buildPaths(
  fit,
  coefs = FALSE,
  sig = 1,
  stand = FALSE,
  covs = FALSE,
  stars = NULL,
  digits = 2
)
```

Arguments

fit	A model fit object of class lavaan.
coefs	whether or not to include significant path coefficient values in diagram
sig	significance level for determining what significant paths are
stand	Should the coefficients being used be standardized coefficients
covs	Should model covariances be included in the diagram
stars	a character vector indicating which parameters should include significance stars be included for regression paths, latent paths, or covariances. Include which of the 3 you want ("regress", "latent", "covs"), default is none.
digits	A number indicating the desired number of digits for the coefficient values in the plot

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embed_plot_pdf	*Embeds a plot into an rmarkdown pdf*

Description

Embeds a plot into an rmarkdown pdf

Usage

```
embed_plot_pdf(plot, path)
```

Arguments

plot	plot object created by `lavaanPlot`
path	Filename to save the image

Value

no return value calls `include_graphics` to embed plot in pdf

Examples

```
library(lavaan)
model <- 'mpg ~ cyl + disp + hp
          qsec ~ disp + hp + wt'
fit <- sem(model, data = mtcars)
pl <- lavaanPlot(model = fit)
## Not run:
embed_plot_pdf(pl, "plot2.pdf")

## End(Not run)
```

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getNodes	*Extracts the paths from the lavaan model.*

Description

Extracts the paths from the lavaan model.

Usage

```
getNodes(fit)
```

Arguments

fit	A model fit object of class lavaan.

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lavaanPlot *Plots lavaan path model with DiagrammeR*

Description

Plots lavaan path model with DiagrammeR

Usage

```
lavaanPlot(name = "plot", model, labels = NULL, ...)
```

Arguments

name	A string of the name of the plot.
model	A model fit object of class lavaan.
labels	An optional named list of variable labels.
...	Additional arguments to be called to buildCall and buildPaths

Value

A Diagrammer plot of the path diagram for model

Examples

```
library(lavaan)
model <- 'mpg ~ cyl + disp + hp
         qsec ~ disp + hp + wt'
fit <- sem(model, data = mtcars)
lavaanPlot(model = fit, node_options = list(shape = "box", fontname = "Helvetica"),
 edge_options = list(color = "grey"), coefs = FALSE)
```

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save_png *Saves a plot as a png*

Description

Saves a plot as a png

Usage

```
save_png(plot, path)
```

Arguments

plot	plot object created by lavaanPlot
path	Filename to save the image

Value

no return value saves plot as png

Examples

```
library(lavaan)
model <- 'mpg ~ cyl + disp + hp
          qsec ~ disp + hp + wt'
fit <- sem(model, data = mtcars)
pl <- lavaanPlot(model = fit)
## Not run:
save_png(pl, "plot.png")

## End(Not run)
```

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 sig_stars   *Generates standard significance stars*

Description

Generates standard significance stars

Usage

```
sig_stars(pvals)
```

Arguments

pvals   a vector of p values

Index