Package 'PRISMA2020'

October 12, 2022

Title Make Interactive 'PRISMA' Flow Diagrams

Version 0.0.3

Description Systematic reviews should be described in a high degree of methodological detail. The 'PRISMA' Statement calls for a high level of reporting detail in systematic reviews and meta-analyses. An integral part of the methodological description of a review is a flow diagram. This package produces an interactive flow diagram that conforms to the 'PRISMA2020' preprint. When made interactive, the reader/user can click on each box and be directed to another website or file online (e.g. a detailed description of the screening methods, or a list of excluded full texts), with a mouse-over tool tip that describes the information linked to in more detail. Interactive versions can be saved as HTML files, whilst static versions for inclusion in manuscripts can be saved as HTML, PDF, PNG, SVG, PS or WEBP files.

Imports DiagrammeR, DiagrammeRsvg, htmltools, htmlwidgets, rsvg, scales, shiny, shinyjs, stats, stringr, utils, xml2, webp, DT, rio, tools

License MIT + file LICENSE

Encoding UTF-8

RoxygenNote 7.1.1

NeedsCompilation no

Author Neal Haddaway [aut, cre] (<https://orcid.org/0000-0003-3902-2234>), Luke McGuinness [aut] (<https://orcid.org/0000-0001-8730-9761>), Chris Pritchard [aut] (<https://orcid.org/0000-0002-1143-9751>)

Maintainer Neal Haddaway <nealhaddaway@gmail.com>

Repository CRAN

Date/Publication 2021-07-12 09:30:05 UTC

R topics documented:

PRISMA_data 2
PRISMA_flowdiagram 2

PRISMA_save 4
read_PRISMAdata 5
sr_flow_interactive 6

Index **7**

`PRISMA_data` *Read in PRISMA flow diagram data*

Description

Read in a template CSV containing data for the flow diagram

Usage

```
PRISMA_data(data)
```

Arguments

`data`	File to read in.

Value

A list of objects needed to plot the flow diagram

Examples

```
csvFile <- system.file("extdata", "PRISMA.csv", package = "PRISMA2020")
data <- read.csv(csvFile);
data <- PRISMA_data(data);
```

`PRISMA_flowdiagram` *Plot interactive flow diagrams for systematic reviews*

Description

Produces a PRISMA2020 style flow diagram for systematic reviews, with the option to add interactivity through tooltips (mouseover popups) and hyperlink URLs to each box. Data can be imported from the standard CSV template provided.

Usage

```
PRISMA_flowdiagram(
  data,
  interactive = FALSE,
  previous = TRUE,
  other = TRUE,
  fontsize = 7,
  font = "Helvetica",
  title_colour = "Goldenrod1",
  greybox_colour = "Gainsboro",
  main_colour = "Black",
  arrow_colour = "Black",
  arrow_head = "normal",
  arrow_tail = "none",
  side_boxes = TRUE
)
```

Arguments

data	List of data inputs including numbers of studies, box text, tooltips and urls for hyperlinks. Data inputted via the PRISMA_data() function. If inputting individually, see the necessary parameters listed in the PRISMA_data()) function and combine them in a list using data <- list().
interactive	Logical argument TRUE or FALSE whether to plot interactivity (tooltips and hyperlinked boxes).
previous	Logical argument (TRUE or FALSE) specifying whether previous studies were sought.
other	Logical argument (TRUE or FALSE) specifying whether other studies were sought.
fontsize	The font size for text in each box. The default is '12'.
font	The font for text in each box. The default is 'Helvetica'.
title_colour	The colour for the upper middle title box (new studies). The default is 'Goldenrod1'. See 'DiagrammeR' colour scheme http://rich-iannone.github.io/DiagrammeR/graphviz_and_mermaid.html#colors.
greybox_colour	The colour for the left and right column boxes. The default is 'Gainsboro'. See 'DiagrammeR' colour scheme http://rich-iannone.github.io/DiagrammeR/graphviz_and_mermaid.html#colors.
main_colour	The colour for the main box borders. The default is 'Black'. See 'DiagrammeR' colour scheme http://rich-iannone.github.io/DiagrammeR/graphviz_and_mermaid.html#colors.
arrow_colour	The colour for the connecting lines. The default is 'Black'. See 'DiagrammeR' colour scheme http://rich-iannone.github.io/DiagrammeR/graphviz_and_mermaid.html#colors.
arrow_head	The head shape for the line connectors. The default is 'normal'. See DiagrammeR arrow shape specification http://rich-iannone.github.io/DiagrammeR/graphviz_and_mermaid.html#arrow-shapes.

arrow_tail	The tail shape for the line connectors. The default is 'none'. See DiagrammeR arrow shape specification http://rich-iannone.github.io/DiagrammeR/graphviz_and_mermaid.html#arrow-shapes.
side_boxes	Whether or not to include the blue label boxes along the side

Value

A flow diagram plot.

Examples

```
csvFile <- system.file("extdata", "PRISMA.csv", package = "PRISMA2020")
data <- read.csv(csvFile);
data <- PRISMA_data(data);
plot <- PRISMA_flowdiagram(data,
                fontsize = 12,
                interactive = TRUE,
                previous = FALSE,
                other = TRUE);
plot
```

PRISMA_save *Save PRISMA2020 flow diagram*

Description

Save the output from PRISMA_flowdiagram() to the working directory.

Usage

```
PRISMA_save(
  plotobj,
  filename = "PRISMA2020_flowdiagram.html",
  filetype = NA,
  overwrite = FALSE
)
```

Arguments

plotobj	A plot produced using PRISMA_flowdiagram().
filename	The filename to save (including extension)
filetype	The filetype to save the plot in, supports: HTML, PDF, PNG, SVG, PS and WEBP (if NA, the filetype will be calculated out based on the file extension) HTML files maintain hyperlinks and tooltips
overwrite	if TRUE, will overwrite an existing file

Value

the absolute filename of the saved diagram plot.

Examples

```
csvFile <- system.file("extdata", "PRISMA.csv", package = "PRISMA2020")
data <- read.csv(csvFile);
data <- PRISMA_data(data);
plot <- PRISMA_flowdiagram(data,
                fontsize = 12,
                interactive = TRUE,
                previous = FALSE,
                other = TRUE);
PRISMA_save(plot, filename = tempfile(), filetype="html");
```

---

read_PRISMAdata *Read in PRISMA flow diagram data - DEPRECATED*

Description

DEPRECATED - read in a template CSV containing data for the flow diagram

Usage

```
read_PRISMAdata(data)
```

Arguments

data	File to read in.

Value

A list of objects needed to plot the flow diagram

See Also

PRISMA_data()

`sr_flow_interactive` *Plot interactive flow diagram for systematic reviews - DEPRECATED*

Description

DEPRECATED - Converts a PRISMA systematic review flow diagram into an interactive HTML plot, for embedding links from each box.

Usage

```
sr_flow_interactive(plot, urls, previous, other)
```

Arguments

`plot`	A plot object from `PRISMA_flowdiagram()`.
`urls`	A dataframe consisting of two columns: nodes and urls. The first column should contain 19 rows for the nodes from node1 to node19. The second column should contain a corresponding URL for each node.
`previous`	Logical argument (TRUE or FALSE) (supplied through `PRISMA_flowdiagram()`) specifying whether previous studies were sought.
`other`	Logical argument (TRUE or FALSE) (supplied through `PRISMA_flowdiagram()`) specifying whether other studies were sought.

Value

An interactive flow diagram plot.

See Also

`PRISMA_interactive_()`

Index

PRISMA_data, 2
PRISMA_data(), *3*, *5*
PRISMA_flowdiagram, 2
PRISMA_flowdiagram(), *4*, *6*
PRISMA_interactive_(), *6*
PRISMA_save, 4

read_PRISMAdata, 5

sr_flow_interactive, 6