Package ‘PRISMAstatement’

May 9, 2019

Title Plot Flow Charts According to the "PRISMA" Statement

Version 1.1.1

Description Plot a PRISMA <http://prisma-statement.org/> flow chart describing the identification, screening, eligibility and inclusion or studies in systematic reviews. The PRISMA statement defines an evidence-based, minimal set of items for reporting in systematic reviews and meta-analyses. PRISMA should be used for the reporting of studies evaluating randomized clinical trials (RCT), and is also for reporting on systematic reviews of other types of research. There is also a function to generate flow charts describing exclusions and inclusions for any kind of study.

License GPL-3

URL https://github.com/jackwasey/PRISMAstatement

BugReports https://github.com/jackwasey/PRISMAstatement/issues

Imports DiagrammeR

Suggests DiagrammeRsvg, knitr, rmarkdown, rsvg, scales, testthat, utils

VignetteBuilder knitr

Encoding UTF-8

LazyData true

RoxygenNote 6.1.1.9000

NeedsCompilation no

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Repository CRAN

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\textbf{R topics documented:}

\begin{verbatim}
prisma .......................... 2
\end{verbatim}

Index 4
Generate a PRISMA statement flow chart

Description

Generate PRISMA statement flow chart for use in retrospective medical research. Almost all arguments are mandatory, as they are in the recommended PRISMA statement.

Usage

```r
prisma(found, found_other, no_dupes, screened, screen_exclusions,
       full_text, full_text_exclusions, qualitative, quantitative = NULL,
       labels = NULL, extra_dupes_box = FALSE, ..., dpi = 72,
       font_size = 10)
```

```r
prisma_graph(found, found_other, no_dupes, screened, screen_exclusions,
             full_text, full_text_exclusions, qualitative, quantitative = NULL,
             labels = NULL, extra_dupes_box = FALSE, ..., dpi = 72,
             font_size = 10)
```

Arguments

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>found</td>
<td>Records found through database searching</td>
</tr>
<tr>
<td>found_other</td>
<td>Additional records identified through other sources</td>
</tr>
<tr>
<td>no_dupes</td>
<td>Records after duplicates removed</td>
</tr>
<tr>
<td>screened</td>
<td>Records screened</td>
</tr>
<tr>
<td>screen_exclusions</td>
<td>Records excluded</td>
</tr>
<tr>
<td>full_text</td>
<td>Full-text articles assessed for eligibility</td>
</tr>
<tr>
<td>full_text_exclusions</td>
<td>Full-text articles excluded with reasons</td>
</tr>
<tr>
<td>qualitative</td>
<td>Studies included in qualitative analysis</td>
</tr>
<tr>
<td>quantitative</td>
<td>Studies included in quantitative synthesis (meta-analysis)</td>
</tr>
<tr>
<td>labels</td>
<td>NULL is the default, but if a named list of character strings, the box matching each name will get the corresponding label. See examples.</td>
</tr>
<tr>
<td>extra_dupes_box</td>
<td>Single logical value, default is FALSE which corresponds to the example 2009 PRISMA Statement Flow Chart. If TRUE, then an additional box will be presented indicating the number of duplicates removed, calculated from the other numbers.</td>
</tr>
</tbody>
</table>

... Further arguments are passed to grViz
Dots per inch, 72 is the default here, and in Diagrammer itself it claims to be 96. Varying the DPI (which is done in the DOT file) unfortunately does not get detected by the downstream processing by the 'htmlwidgets' package. To overcome this, the user can add height and width arguments which are passed through. It is easy to for scaled graphs to fall off the canvas, or be crushed into the top-left corner, and unfortunately this requires trial and error. Increasing DPI over 72 with this setting tends to truncate the graph. On the other hand, leaving the DPI at 72 and increasing both height and width appears to consistently give higher resolution images.

font_size integer font size in points, default is 10. Diagrammer via htmlwidgets should scale the boxes to include the text no matter what size font is used. However, the heuristics are not perfect, so tweaking the font size here may help prepare for publication.

Functions

- prisma_graph: Generate the 'dot' graph text

Source

http://prisma-statement.org/PRISMAStatement/FlowDiagram

Examples

```r
prisma(1000, 20, 270, 270, 10, 260, 20, 240, 107)
prisma(1000, 20, 270, 270, 10, 260, 20, 240, 107, labels = list(found = "FOUND"))
prisma(1000, 20, 270, 270, 10, 260, 20, 240, 107, dpi = 24)
prisma(1000, 20, 270, 270, 10, 260, 20, 240, 107, extra_dupes_box = TRUE)
# vary the font size
prisma(1000, 20, 270, 270, 10, 260, 20, 240, 107, font_size = 6)
prisma(1000, 20, 270, 270, 10, 260, 20, 240, 107, font_size = 60)
# giving impossible numbers should cause an error
## Not run:
prisma(1, 2, 3, 4, 5, 6, 7, 8, 9)
## Not run:
prisma(1000, 20, 270, 270, 10, 260, 19, 240, 107)
prisma(1000, 20, 270, 269, 260, 20, 240, 107)
## End(Not run)
```
Index

prisma, 2
prisma_graph(prisma), 2