

Summary tables — R:xtable, R:stargazer, R:rapport and own functions for group comparisons

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1. Introduction

Object conversion functions



Max Kuhn is giving guidance upon reproducible research on CRAN Task View: Reproducible Research.

Aim

"[...] to tie specific instructions to data analysis and experimental data so that scholarship can be recreated, better understood and verified."

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HTML / LaTeX conversion



Summary tables/statistics

Tables/cross-tabulations

Statistical models/methods

Some object conversion functions for HTML or LaTeX export can be found in the following R packages:

HTMI/LaTeX

Hmisc, NMOF, papeR, quantreg, rapport, reporttools, sparktex, tables, xtable, ztable, stargazer
Hmisc, lazyWeave, knitLatex, knitr, reporttools, ztable, DT, formattable, htmlTable, HTMLUtils, hwriter, SortableHTMLTables, texreg apsrtable, memisc, quantreg, rms, stargazer, suRtex, texreg, xtable, ztable, rapport

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2. R:xtable

R:xtable



Objective Maintainer Version

Export Tables to LaTeX or HTML

Main functions

xtable(x, caption=NULL, label=NULL, align=NULL,
digits=NULL, display=NULL, auto=FALSE, ...)
Converts an R object to an xtable object, which can then be printed as a
LaTeX or HTML table

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3. R:stargazer

R:stargazer



Objective Maintainer Version

Main functions

Well-Formatted Regression and Summary Statistics Tables

```
stargazer(..., type="latex", title="", style="default", summary=NULL, out=NULL, out.header=FALSE, ...)
Produces LaTeX code, HTML/CSS code and ASCII text for well-formatted tables that hold regression analysis results from several models side-by-side, as well as summary statistics.
```

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4. Own functions for group comparisons

https://github.com/MarcusVollmer/R-Helper-Functions



Objective

Maintainer Version

Main functions

Helper functions for LaTeX representations and integration of statistical testing in tables

strtable(df, n=3, width=80, n.levels=n,
width.levels=width, factor.values=as.character)
A modified str implementation for data frames (originally by Jason Bryer).

stargazer_long(x, ..., output="", rotate=0, digits=NULL, ci=TRUE)
A modification of stargazer to display long tables, to allow rotations and LaTeX column specifications.

https://github.com/MarcusVollmer/R-Helper-Functions



Main functions

mytable(x, y, z=NULL, ci=FALSE, prec="%.1f", prec_p="%.2e", latex="empty", pct_sign=FALSE, tablefootnote=TRUE, fn_warn="*")

A cross-table for factor variables to display counts or summary statistics of a continuous variable with univariable statistical testing.

```
characteristics_table(x, y, D, rowcol, prec="%.1f", prec_continuous="%.0f", prec_p="%.4f", latex="empty", tablefootnote=TRUE, fn=..., fn_warn=...)

Creates stratified tables of data along with univariable statistical testing.
```

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5. R:rapport

R:rapport



Objective

Facilitating the creation of reproducible statistical report templates. Once created, rapport templates can be exported to various external formats (HTML, LaTeX, PDF, ODT etc.) with pandoc as the converter backend.

Maintainer Version Main functions

rapport('templatename', data=Data, var='Var1',
var2='Var2', ...)

Rapport requires a template file, and template specific input parameters to generate reproducible statistical reports.

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https://github.com/MarcusVollmer/campR

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Thank You for Your Attention!