Package 'SimplifyStats'

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Type Package

Title Simplifies Pairwise Statistical Analyses

Version 2.0.4

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Description Pairwise group comparisons are often performed. While there are many packages that can perform these analyses, often it is the case that only a subset of comparisons are desired. 'SimplifyStats' performs pairwise comparisons and returns the results in a tidy fashion.

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Imports assertthat(>= 0.2.0), tibble(>= 1.4.2), dplyr(>= 0.7.4), broom(>= 0.4.4), moments(>= 0.14)

Suggests testthat, knitr, rmarkdown

RoxygenNote 7.1.0

Encoding UTF-8

VignetteBuilder knitr

NeedsCompilation no

Repository CRAN

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R topics documented:

SimplifyStats-package *A short title line describing what the package does*

Description

A more detailed description of what the package does. A length of about one to five lines is recommended.

Details

This section should provide a more detailed overview of how to use the package, including the most important functions.

Author(s)

Your Name, email optional.

Maintainer: Your Name <your@email.com>

References

This optional section can contain literature or other references for background information.

See Also

Optional links to other man pages

Examples

```
  ## Not run:
     ## Optional simple examples of the most important functions
     ## These can be in \dontrun{} and \donttest{} blocks.

## End(Not run)
```

add_missing *Add rows for unused combinations of factor levels*

Description

add_missing adds rows for unused combinations of factor levels.

The function takes as input a data.frame or tibble, the column names of grouping variables, and a named list of default values.

Usage

```
add_missing(x, group_cols, defaults)
```

Arguments

x	A data.frame or tibble.
group_cols	Vector of the names of the grouping columns.
defaults	A named list of default values.

Value

A tibble

A tibble or data.frame, depending on the class of x.

Examples

```
iris_sub <- dplyr::filter(iris, Species != "virginica")
iris_summary <- dplyr::group_by(iris_sub, Species)
iris_summary <- dplyr::summarise(iris_summary, N = dplyr::n())
iris_summary <- dplyr::ungroup(iris_summary)
add_missing(iris_summary, "Species", list(N = 0))
```

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group_summarize *Calculate descriptive statistics for each group*

Description

group_summarize performs descriptive statistics for each group in a data set.

The function takes as input a data.frame or tibble, the column names of grouping variables, and the column names of variables of interest.

Usage

```
group_summarize(x, group_cols, var_cols, output_format = "v1", ...)
```

Arguments

x	A data.frame or tibble.
group_cols	Vector of the names of the grouping columns.
var_cols	Vector of the names of the variables of interest.
output_format	The version of the output format (v0 or v1).
...	Extra arguments passed to fxn, i.e. na.rm = FALSE, etc.

Value

A tibble

A group_summary object with slots for the results, grouping variables, variables of interest, and any other parameters passed in.

Examples

```
group_summarize(iris, "Species", c("Sepal.Length", "Sepal.Width"))
```

`pairwise_stats` *Calculate pairwise statistics between groups*

Description

pairwise_stats performs a provided function pairwise between all combinations of groups. The first two arguments of the function passed to pairwise_stats must accept vectors of values as inputs. These vectors should correspond to the values for group A and group B, respectively.

The function takes as input a data.frame or tibble, the column names of grouping variables, the column name for a variable of interest, and a function.

Usage

```
pairwise_stats(
  x,
  group_cols,
  var_cols,
  fxn,
  two_way = FALSE,
  output_format = "v1",
  ...
)
```

Arguments

`x`	A data.frame or tibble.
`group_cols`	Vector of the names of the grouping columns.
`var_cols`	Vector of the names of the variables of interest.
`fxn`	The function to be applied.
`two_way`	Whether the order of data inputs to fxn matter.
`output_format`	The version of the output format (v0 or v1).
`...`	Extra arguments passed to fxn, i.e. alternative = "greater", etc.

Value

A tibble.

A pairwise_stats object with slots for the results, grouping variables, variable of interest, and any other parameters passed in, excluding the input data frame.

Examples

```
pairwise_stats(iris, "Species", "Sepal.Length", t.test)
```

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