

# Package ‘SimplifyStats’

July 2, 2018

**Type** Package

**Title** Simplifies Pairwise Statistical Analyses

**Version** 1.0.1

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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.

**License** GPL (>= 3)

**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** 6.0.1

**Encoding** UTF-8

**VignetteBuilder** knitr

**NeedsCompilation** no

**Repository** CRAN

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## R topics documented:

SimplifyStats-package . . . . .	2
group_summarize . . . . .	2
pairwise_stats . . . . .	3
print.group_summary . . . . .	4
print.pairwise_stats . . . . .	4

<b>Index</b>	<b>6</b>
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SimplifyStats-package *A short title line describing what the package does*

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**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)
```

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group\_summarize *Calculate descriptive statistics for each group*

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**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, ...)
```

**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.
...	Extra arguments passed to fxn, i.e. na.rm = FALSE, etc.

**Value**

An object of class `group_summary`. `group_summary` is a list of data frames. The name of each element of the list is the name of the corresponding variable analyzed.

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"))
```

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pairwise_stats	<i>Calculate pairwise statistics between groups</i>
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**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_col, fxn, two_way = FALSE, ...)
```

**Arguments**

x	A data.frame or tibble.
group_cols	Vector of the names of the grouping columns
var_col	Name of the variable of interest
fxn	The function to be applied
two_way	Whether the order of data inputs to fxn matter
...	Extra arguments passed to fxn, i.e. alternative = "greater", etc.

**Value**

An object of class `pairwise_stats`.

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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```
print.group_summary Print a group_summary object
```

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**Description**

Print a `group_summary` object

**Usage**

```
## S3 method for class 'group_summary'
print(x, num_to_print = 3, ...)
```

**Arguments**

<code>x</code>	An object of class <code>group_summary</code> .
<code>num_to_print</code>	An integer specifying the number of tibbles to print.
<code>...</code>	Additional parameters passed to <code>print</code> .

**Examples**

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

---

```
print.pairwise_stats Print a pairwise_stats object
```

---

**Description**

Print a `pairwise_stats` object

**Usage**

```
## S3 method for class 'pairwise_stats'
print(x, ...)
```

**Arguments**

- x                    An object of class `pairwise_stats`.
- ...                  Additional parameters passed to `print`.

**Examples**

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

# Index

## \*Topic **package**

SimplifyStats-package, [2](#)

group\_summarise (group\_summarize), [2](#)

group\_summarize, [2](#)

pairwise\_stats, [3](#)

print.group\_summary, [4](#)

print.pairwise\_stats, [4](#)

SimplifyStats (SimplifyStats-package), [2](#)

SimplifyStats-package, [2](#)