

Package ‘Bullock’

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Type Package

Title miscellaneous helper utilities

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Imports gdata, stringr

Description functions that help me do miscellaneous tasks a little more quickly. These range in complexity from a function that just removes NA values from a vector prior to summing it (sumNA) to a function that helps me to build LaTeX tables from regression output in the style that I like (latable).

License GPL (version 2 or later)

LazyLoad yes

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alpha_cronbach	<i>Compute Cronbach's alpha for a battery of items.</i>
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Description

This function is called by `reliability()`. It generally should not be called by end users.

Usage

```
alpha_cronbach(S)
```

Arguments

`S` Variance-covariance matrix of responses to a battery of measurements.

Author(s)

Joseph F. Lucke

ltable	<i>Print LaTeX table of regression results</i>
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Description

Takes a list of regression models and returns a table of regression output formatted for LaTeX. There are two columns per regression: one for the coefficient estimates, another for standard errors.

Usage

```
ltable(tables, substrings.to.remove = NULL, rows.to.remove=NULL, npmakebox = TRUE)
```

Arguments

`tables`

`substrings.to.remove`

Should be a list of strings or regular expressions. If it is not a list, it will be coerced to a list with `as.list()`.

Substrings in the row names that match any element in `substrings.to.remove` will be removed before the output is created.

`rows.to.remove`

Should be a list of strings or regular expressions. If it is not a list, it will be coerced to a list with `as.list()`.

Rows that contain substrings matching any element in `rows.to.remove` will be removed from the output table before it is returned by the function. This is useful for creating "incomplete" regression tables that do not contain rows for some variables, e.g., control variables.

`npmakebox`

Value

Returns a table of regression output formatted for LaTeX.

Author(s)

John G. Bullock

1NA*Calculate length of vector after omitting NA values*

Usage

1NA(x)

Arguments

x

meanNA*Calculate mean of vector after omitting NA values*

Usage

meanNA(x)

Arguments

x

merge_fac*Merge factors*

Description

Fill in missing values in one factor with missing values from another.

Usage

merge_fac(fac.names)

Arguments

fac.names character vector of factor names

Details

All factors should be of the same length. Missing values in the first factor named in fac.names are filled in with corresponding values from the second factor. Missing values in this merged factor are filled in with corresponding values from the third factor. And so on.

Note

Merging factors in this way is trickier than just using a command like `fac1[is.na(fac1)] <- fac2[is.na(fac1)]` because `fac1` and `fac2` may have different factor levels. This commands takes care of the problem by merging the levels among different factors.

Author(s)

John G. Bullock

modal_value	<i>Find modal value of a vector</i>
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Description

Find modal value of a vector.

Usage

```
modal_value(x, na.rm=FALSE)
```

Arguments

<code>x</code>	a vector
<code>na.rm</code>	should NAs be removed from the vector before modal value is determined?

Author(s)

unknown; copied from <http://rwiki.sciviews.org/doku.php?id=tips:stats-basic:modalvalue>

move.to.df	<i>Move a list of variables into a data frame.</i>
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Usage

```
move.to.df(pattern = NULL, move = TRUE)
```

Arguments

<code>pattern</code>
<code>move</code>

noNAmatrix	<i>Remove rows with any NA from a matrix.</i>
------------	---

Usage

```
noNAmatrix(x)
```

Arguments

x

reliability	<i>Compute Cronbach's alpha for a battery of items.</i>
-------------	---

Description

Compute Cronbach's alpha for a battery of items, and show the reliability for all different batteries that might be created by removing one item from the original battery.

Usage

```
reliability (x, ...)
```

Arguments

x	Matrix of measurements, e.g., survey responses. Cannot have missing data.
...	Arguments to be passed to <code>alpha.cronbach()</code> . Currently serves no function.

Author(s)

Peter Ellis

rescale	<i>Rescale a variable</i>
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Usage

```
rescale(x, newrange)
```

Arguments

x
newrange

Author(s)

Simon D. Jackman

sdNA	<i>Calculate standard deviation of vector after omitting NA values</i>
------	--

Usage

```
sdNA(x, na.rm = TRUE)
```

Arguments

```
x
na.rm
```

split_fac	<i>Create dummy variables for each level of a factor.</i>
-----------	---

Usage

```
split_fac(fac, prefix=paste(deparse(substitute(NES.year.fac)), '.', sep=''), env=.GlobalEnv, ...)
```

Arguments

fac	factor variable
prefix	substring that begins the name of each created dummy variable
env	environment in which the dummy variables are created
...	arguments passed to assign()

Author(s)

John G. Bullock

sumNA	<i>Calculate sum of vector after omitting NA values</i>
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Usage

```
sumNA(x)
```

Arguments

```
x
```

table.sep	<i>helper function for latable()</i>
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Usage

```
table.sep(table, separator = "&", sig.digits = 2)
```

Arguments

```
table  
separator  
sig.digits
```

varNA	<i>Calculate variance of vector after omitting NA values</i>
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Usage

```
varNA(x)
```

Arguments

```
x
```

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