Package 'psymetlab'

April 7, 2016

Title Provides useful functions for APA formatting and writing output to Excel

Version 1.0.1

Description

Package includes a variety of functions to tag significant correlations, write data to excel, etc.

Depends R (>= 3.1.3)

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LazyData true

RoxygenNote 5.0.1

Imports psych, xlsx

R topics documented:

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f.corstar   *Add asterisk(s) to significant correlations*

Description

Uses an output object from the Psych package and adds 1 or 2 askterisks (stars) to the correlation for APA table output. Returns object as dataframe.

Usage

```
f.corstar(corr.obj, is.triangle = TRUE, p.val.1 = 0.05, p.val.2 = 0.01)
```

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Arguments

`corr.obj`	is the output list object from the corr.test function in the Psych package
`is.triangle`	is whether the correlation is a symetric matrix (default) or a rectangular matrix in which one set of variables is correlated with a different set.
`p.val.1`	is the p-value desired to trigger a single astrisk (default = .05)
`p.val.2`	is the p-value desired to trigger a second astrisk added to the first default = .01. p.val.2 should be a smaller p val than p.val.1. set p.val.2 = FALSE if no second astrisk is desired

Author(s)

Adam Meade <awmeade@ncsu.edu>

Examples

```
## Not run:
require('psych')
 corrs.1 = corr.test(sat.act)
 f.corstar(corrs.1)
 f.corstar(corrs.1, p.val.1 = .01, p.val.2 = FALSE)
 corrs.2 = corr.test(sat.act[3:5],sat.act[6])
 f.corstar(corrs.2,is.triangle = FALSE)

## End(Not run)
```

`f.get.reg.output`	*Take output from lm function and put relevant info into a dataframe*

Description

Returns a dataframe with predictors and coefficients listed along with model statistics F,df,p, and r-squred values.

Usage

```
f.get.reg.output(out.lm)
```

Arguments

`out.lm`	results of a linear regression from lm()

Author(s)

Adam Meade <awmeade@ncsu.edu>

Examples

```
## Not run:
model.out <- lm(sat.act[,1]~sat.act[,2]+sat.act[,3])
f.get.reg.output(model.out)

## End(Not run)
```

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f.screen.outliers *Deletes multivariate outliers using Mahalanobis distance*

Description

Accepts a dataframe and optional list of variables within that dataframe for which to screen the data. The function computes mahalanobis distace and associated chi-square on the screening data and then returns a dataframe that is a subset of the original all.data dataframe based on non-significant chi-square values.

Usage

```
f.screen.outliers(all.data, screening.vars = NULL, p.val = 0.05)
```

Arguments

screening.vars   is an optional array of variable names on which the screening should be based.

p.val   is the cutoff value of the chi-square distribution to use. default is .05.

add.data   is the database from which to remove outliers

Author(s)

Adam Meade <awmeade@ncsu.edu>

Examples

```
## Not run:
nrow(trees)
new.data <- f.screen.outliers(trees)
nrow(new.data)

## End(Not run)
```

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f.write.corrs *Formats in APA format and writes correlation matrices to an excel sheet*

Description

Uses an output object from the Psych package and adds 1 or 2 askterisks (stars) to the correlation for APA table output. Returns object as dataframe. Writes correlational data for r, n, and pvalues to three consecutively named Excel sheets.

Usage

```
f.write.corrs(f.name = "output.xlsx", s.name, obj.corrs, print.p = TRUE,
  print.n = TRUE, ...)
```

Arguments

`f.name`	is the file name to which to write the data. default = 'output.xlsx'
`s.name`	is the name of the Excel sheet(s) to which to write the data
`obj.corrs`	is the correlation object from the corr.test function in the Psych package
`print.p`	requests printing of p values. default = TRUE
`print.n`	requests printing of sample size (n). default = TRUE
`...`	parameters passed to the f.corstar function

Author(s)

Adam Meade <awmeade@ncsu.edu>

Examples

```
## Not run:
corrs = corr.test(sat.act)
f.write.corrs(s.name='example',obj.corrs=corrs)
f.write.corrs(f.name='example.xlsx',s.name='example',obj.corrs=corrs,p.val.2=FALSE)

## End(Not run)
```

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