

Package ‘psymetlab’

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

Version 1.0.0

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:

f.corstar	1
f.get.reg.output	2
f.write.corrs	3

Index	4
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f.corstar	<i>Add asterisk(s) to significant correlations</i>
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Description

Uses an output object from the Psych package and adds 1 or 2 asterisks (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)
```

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 symmetric 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 asterisk (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)

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Examples

```
R = matrix(cbind(1,.80,.2,.80,1,.7,.2,.7,1),nrow=3)
U = t(chol(R))
set.seed(1)
random.normal = matrix(rnorm(dim(U)[1]*100,0,1), nrow=dim(U)[1], ncol=100);
X = as.data.frame(t(U %%% random.normal))
require('psych')
corrs.1 = corr.test(X)
f.corstar(corrs.1)
f.corstar(corrs.1, p.val.1 = .01, p.val.2 = FALSE)
corrs.2 = corr.test(X[1:2],X[3])
f.corstar(corrs.2,is.triangle = FALSE)
```

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-squared values.

Usage

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

Arguments

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

Author(s)

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Examples

```
R = matrix(cbind(1,.80,.2,.80,1,.7,.2,.7,1),nrow=3)
U = t(chol(R))
set.seed(1)
random.normal <- matrix(rnorm(dim(U)[1]*100,0,1), nrow=dim(U)[1], ncol=100);
X <- as.data.frame(t(U %%% random.normal))
model.out <- lm(X[,1]~X[,2]+X[,3])
f.get.reg.output(model.out)
```

f.write.corrs	<i>Formats in APA format and writes correlation matrices to an excel sheet</i>
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Description

Uses an output object from the Psych package and adds 1 or 2 asterisks (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.starcor function

Author(s)

Adam Meade <awmeade@ncsu.edu>

Examples

```
library('psych')
R = matrix(cbind(1,.80,.2,.80,1,.7,.2,.7,1),nrow=3)
U = t(chol(R))
set.seed(1)
random.normal = matrix(rnorm(dim(U)[1]*100,0,1), nrow=dim(U)[1], ncol=100);
X = as.data.frame(t(U %*% random.normal))
corrs = corr.test(X)
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)
```

Index

f.corstar, [1](#)
f.get.reg.output, [2](#)
f.write.corrs, [3](#)