Package 'blindreview'

July 22, 2025

Title Enables Blind Review of Database

Version 2.0.0

Description Randomly reassigns the group identifications to one of the variables of the database, say Treatment, and randomly reassigns the observation numbers of the dataset. Reorders the observations according to these new numbers. Centers each group of Treatment at the grand mean in order to further mask the treatment. An unmasking function is provided so that the user can identify the potential outliers in terms of their original values when blinding is no longer needed. It is suggested that a forward search procedure be performed on the masked data. Details of some forward search functions may be found in <https://CRAN.R-project.org/package=forsearch>.

Depends R (>= 4.2)

License GPL (>= 3)

SystemRequirements gmp (>= 4.1)

Encoding UTF-8

RoxygenNote 7.2.3

Imports Hmisc(>= 4.7.2)

Suggests rmarkdown, knitr

NeedsCompilation no

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Repository CRAN

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brMask *Enables Blind Review of Database*

Description

Assigns identification randomly to one of the variables of the dataset as chosen by the user, say Treatment, and assigns random number to the observations of the dataset. Reorders the observations. A file is created so that the user can identify any outliers identified by the review in terms of their original, unchanged values.

Usage

```
brMask(data, blinded, verbose=TRUE)
```

Arguments

data	Database to be evaluated
blinded	Character, name of variable to be blinded
verbose	TRUE causes function identifier to display before and after run

Details

The first variable of the database must be Observation. The first element of the brMask object is the database to be reviewed blindly.

Value

LIST

`Masked Dataframe`
: Database with substitute variable and substitute observation numbers

`Randomization Date`
: Date of randomization of blinded items

`Variable`
: Codes for unblinding variable that was blinded

`Observations`
: Codes for unblinding observation numbers

`Call`
: Call to this function

Author(s)

William R. Fairweather

References

Atkinson, A and M Riani. Robust Diagnostic Regression Analysis, Springer, New York, 2000. Pinheiro, JC and DM Bates. Mixed-Effects Models in S and S-Plus, Springer, New York, 2000. https://CRAN.R-project.org/package=forsearch E9 Statistical Principles for clinical Trials, US Food & Drug Administration and International Conference on Harmonization, 1998

Examples

```
Observation <- 1:14
Dose <- c(3.4,5.2,7,8.5,10.5,13,18,21,28,6.5,10,14,21.5,29)
Prep <- factor(c(rep(0,9),rep(1,5)))
Convulse <- c(0,5,11,14,18,21,23,30,27,2,10,18,21,27)
Total <- c(33,32,38,37,40,37,31,37,30,40,30,40,35,37)
NoConvulse <- Total-Convulse
mice <- data.frame(Observation,Dose,Prep,Convulse,Total,NoConvulse)
brMask(data=mice,blinded="Prep")
```

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unmask *Print Tables of Encoded and Original Variable IDs and Observation Numbers*

Description

Prints tables resulting from masking performed by brMask function to permit user to identify potential outliers by their original identities

Usage

```
unmask(object, obsrange=NULL, verbose=TRUE)
```

Arguments

object	Name of brMask object
obsrange	NULL or vector of integers, NULL causes entire data frame of observation numbers to be printed
verbose	TRUE causes function identifier to display before and after run

Value

None returned, printout only

Author(s)

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