Package ‘PermutationR’

January 6, 2022

Type Package
Title Conduct Permutation Analysis of Variance in R
Version 0.1.0
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Description Conduct permutation One-Way or Two-Way Analysis of Variance in R. Use different permutation types for two-way designs.
License MIT + file LICENSE
Encoding UTF-8
NeedsCompilation no
Repository CRAN
Date/Publication 2022-01-06 09:30:06 UTC

R topics documented:

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permuANOVA

Description
Conducts permutational one-way and two-way ANOVAs. This code has been modified from Howell D. (2015)

Usage
permuANOVA(y,x,z, perm.type="unrestricted", reps=5000)
Arguments

- **y**: Dependent variable, numeric vector
- **x**: Independent variable, integer vector or factor up to 10 levels
- **z**: (Optional) Independent variable, integer vector or factor up to 10 levels
- **perm.type**: (Optional) Method of permutation for two-way designs. Either "unrestricted" or "restricted". Default is "unrestricted"
- **reps**: Number of permutations, default is 5000.

Details

"unrestricted" computes main effect permutations in an unrestricted fashion; "restricted" restricts main effect permutations within levels of the other independent variable. In both cases, the interaction is computed in an unrestricted fashion.

Value

For two-way designs: returns a data-frame containing p-values from permutation test for "Variable_x", "Variable_z" and interaction "x:z" For one-way designs: returns a data-frame containing p-values from permutation test for "Variable_x" only.

Author(s)

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References


See Also

Package permuco function aovperm() and Package RVAideMemoire function perm.anova()

Examples

```r
Data <- ToothGrowth
attach(ToothGrowth)
permuANOVA(y = len, x = supp, reps=99)

permuANOVA(y=len,x=supp,z=dose, perm.type="unrestricted", reps=99)

permuANOVA(y=len,x=supp,z=dose, perm.type="restricted", reps=99)
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