Package ‘RAP’

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Type Package
Title Reversal Association Pattern
Version 1.1
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Description To find the reversal association between variables.
License GPL-2
LazyLoad yes
NeedsCompilation no
Repository CRAN
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RAP-package  Reversal Association Pattern

Description

Two categorical variables with respective levels I and J are represented in I x J contingency tables. Chi square test is the widely applied test for studying the association between the two categories with conventional limitation on the expected values. However the categories understudy may have no statistically significant association, while sub tables derived from the original one may have significant associations among certain categories and vice versa. Many studies have indicated this
behavior within categorical variables which provides an ample scope to understand Reversal Association Pattern (RAP) between given and its all possible sub table which could be viewed as Posthoc analysis in ANOVA. RAP package has a list of output that includes the number of sub-tables with RAP, corresponding row and column number together with the conclusion of chi square test associated with the given I x J table and a specific level of significance. The required proportions are calculated based on these numbers and conclusions are drawn there in. Additionally it provides the distribution of cell counts in the given I x J table so as to understand the spread of the data.

Details

| Package:   | RAP          |
| Type:      | Package      |
| Version:   | 1.0          |
| Date:      | 2013-04-12   |
| License:   | GPL-2        |

Author(s)

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References


Examples

```r
library(RAP)
a=c(38,58,69,34,R8,17,R8,14,14)
nr=3
cn=3
fnRap(a,nr,nc)
```

fnRap

RAP - Reversal Association Pattern
Description

Two categorical variables with respective levels I and J are represented in I x J contingency tables. Chi square test is the widely applied test for studying the association between the two categories with conventional limitation on the expected values. However the categories understudy may have no statistically significant association, while sub tables derived from the original one may have significant associations among certain categories and vice versa. Many studies have indicated this behavior within categorical variables which provides an ample scope to understand Reversal Association Pattern (RAP) between given and its all possible sub table which could be viewed as Posthoc analysis in ANOVA. RAP package has a list of output that includes the number of sub-tables with RAP, corresponding row and column number together with the conclusion of chi square test associated with the given I x J table and a specific level of significance. The required proportions are calculated based on these numbers and conclusions are drawn there in. Additionally it provides the distribution of cell counts in the given I x J table so as to understand the spread of the data.

Usage

fnRAP(a,nr,nc)

Arguments

- a: input matrix in a row vector form
- nr: number of rows
- nc: number of columns

Value

if p value is less than 0.05 then result is True else False

Author(s)

U Sangeetha and M Subbiah with considerable contribution from M R Srinivasan

References


Examples

a=c(38,58,69,34,R8,17,R8,14,14)
nr=3
nc=3
fnRAP(a,nr,nc)
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