Package ‘kaphom’

February 11, 2019

Type Package
Title Test the Homogeneity of Kappa Statistics
Version 0.3
Author Muammer Albayrak
Maintainer Muammer Albayrak <m.albayrak@ktu.edu.tr>
Imports stats
License GPL-3
Encoding UTF-8
LazyData true
RoxygenNote 6.1.1
NeedsCompilation no
Repository CRAN
Date/Publication 2019-02-11 12:03:18 UTC

R topics documented:

donnerhom .......................................................... 2
fleisshom .......................................................... 3
lscorehom .......................................................... 4
mlscorehom .......................................................... 5
pearsonhom .......................................................... 6
Description

Donner GOF test for homogeneity of kappa statistics

Usage

donnerhom(pp, pm, mm)

Arguments

- `pp` a number vector carrying the number of positive matching rates for each study
- `pm` a number vector carrying the number of non-matching rates for each study
- `mm` a number vector carrying the number of negative matching rates for each study

Details

This function can be used only for studies with binary output

Value

This function prints the Donner GOF test statistic, P-value for hypothesis test of the statistic and whether the difference is statistically significant or not.

Author(s)

Muammer ALBAYRAK

Examples

```r
library(kaphom)
pp <- c(11,26,22)
pm <- c(6,5,14)
mm <- c(22,10,39)
donnerhom(pp,pm,mm)
```
fleissom

Fleiss test for homogeneity of kappa statistics

Description
Fleiss test for homogeneity of kappa statistics

Usage
fleissom(pp, pm, mm)

Arguments
- **pp**: a number vector carrying the number of positive matching rates for each study
- **pm**: a number vector carrying the number of non-matching rates for each study
- **mm**: a number vector carrying the number of negative matching rates for each study

Details
This function can be used only for studies with binary output

Value
This function prints the Fleiss test statistic, P-value for hypothesis test of the statistic and whether the difference is statistically significant or not.

Author(s)
Muammer ALBAYRAK

Examples
```r
library(kaphom)
pp <- c(11, 26, 22)
pm <- c(6, 5, 14)
mm <- c(22, 10, 39)
fleissom(pp, pm, mm)
```
lscorehom

Likelihood Score test for homogeneity of kappa statistics

Description

Likelihood Score test for homogeneity of kappa statistics

Usage

lscorehom(pp, pm, mm)

Arguments

pp a number vector carrying the number of positive matching rates for each study
pm a number vector carrying the number of non-matching rates for each study
mm a number vector carrying the number of negative matching for each study

Details

This function can be used only for studies with binary output

Value

This function prints the Likelihood Score test statistic, P-value for hypothesis test of the statistic and whether the difference is statistically significant or not.

Author(s)

Muammer ALBAYRAK

Examples

library(kaphom)

pp <- c(11, 26, 22)
pm <- c(6, 5, 14)
mm <- c(22, 10, 39)

lscorehom(pp, pm, mm)
mlscorehom

*Modified Likelihood Score test for homogeneity of kappa statistics*

**Description**
Modified Likelihood Score test for homogeneity of kappa statistics

**Usage**
mlscorehom(pp, pm, mm)

**Arguments**
- **pp**: a number vector carrying the number of positive matching rates for each study
- **pm**: a number vector carrying the number of non-matching rates for each study
- **mm**: a number vector carrying the number of negative matching rates for each study

**Details**
This function can be used only for studies with binary output

**Value**
This function prints the Modified Likelihood Score test statistic, P-value for hypothesis test of the statistic and whether the difference is statistically significant or not.

**Author(s)**
Muammer ALBAYRAK

**Examples**
```r
library(kaphom)
pp <- c(11, 26, 22)
pm <- c(6, 5, 14)
mm <- c(22, 10, 39)
mlscorehom(pp, pm, mm)
```
### Description

Pearson GOF test for homogeneity of kappa statistics

### Usage

\[ \text{pearsonhom}(pp, pm, mm) \]

### Arguments

- **pp**: a number vector carrying the number of positive matching rates for each study
- **pm**: a number vector carrying the number of non-matching rates for each study
- **mm**: a number vector carrying the number of negative matching rates for each study

### Details

This function can be used only for studies with binary output

### Value

This function prints the Pearson GOF test statistic, P-value for hypothesis test of the statistic and whether the difference is statistically significant or not.

### Author(s)

Muammer ALBAYRAK

### Examples

```r
library(kaphom)

pp <- c(11, 26, 22)
pm <- c(5, 14)
mm <- c(22, 10, 39)

pearsonhom(pp, pm, mm)
```
Index

donnerhom, 2
fleiss hom, 3
lscorehom, 4
mlscorehom, 5
pearsonhom, 6