

Package: CATT (via r-universe)

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Type Package

Title The Cochran-Armitage Trend Test

Version 2.0

Author Zhicheng Du, Yuantao Hao

Maintainer Zhicheng Du<dgdzc@hotmail.com>

Description This function conducts the Cochran-Armitage trend test to a 2 by k contingency table. It will report the test statistic (Z) and p-value. A linear trend in the frequencies will be calculated, because the weights (0,1,2) will be used by default.

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Imports stats

LazyData TRUE

NeedsCompilation no

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Repository <https://marsdu1989.r-universe.dev>

RemoteUrl <https://github.com/cran/CATT>

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CATT

The Cochran-Armitage Trend Test

Description

This function conducts the Cochran-Armitage trend test to a 2 by k contingency table. It will report the test statistic (Z) and p-value. A linear trend in the frequencies will be calculated, because the weights (0,1,2) will be used by default.

Usage

```
CATT(binomial, ordinal, table)
```

Arguments

ordinal	the vector of the ordinal variable
binomial	the vector of the binomial variable
table	option, the contingency table of table(binomial,ordinal)

Value

Z	the test statistic
p. value	the p value of the hypothesis test

Note

Please feel free to contact us, if you have any advice and find any bug!

Reference:

1. Cochran, WG (1954). Some methods for strengthening the common chi-squared tests. *Biometrics. International Biometric Society.* 10 (4): 417-451.
2. Armitage, P (1955). Tests for Linear Trends in Proportions and Frequencies. *Biometrics. International Biometric Society.* 11 (3): 375-386.

Update:

Version 0.2.0: The p value of two side was specified.

Author(s)

Zhicheng Du<dgdzc@hotmail.com>, Yuantao Hao<haoyt@mail.sysu.edu.cn>

Examples

```
# type of data is variable
binomial=c(rep(0,20),rep(1,10),rep(0,20),rep(1,20),rep(0,20),rep(1,30))
ordinal=c(rep(0,30),rep(1,40),rep(2,50))
CATT(binomial=binomial,ordinal=ordinal)
```

```
# type of data is table
tbl=matrix(c(20,10,20,20,20,30),nrow=2)
CATT(table=tbl)
```

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