Package 'CATT'

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Type Package

Title The Cochran-Armitage Trend Test

Version 2.0

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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

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CATT *The Cochran-Armitage Trend Test*

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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)

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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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