

Package ‘brant’

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Type Package

Title Test for Parallel Regression Assumption

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Description Tests the parallel regression assumption for ordinal logit models generated with the function polr() from the package 'MASS'.

License GPL (>= 2)

Depends R (>= 3.1.0)

Imports MASS, Matrix

URL <https://benjaminschlegel.ch/r/brant/>

NeedsCompilation no

Repository CRAN

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brant	<i>Brant Test</i>
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Description

The function calculates the brant test for ordinal logit models to test the parallel regression assumption.

Usage

```
brant(model, by.var=F)
```

Arguments

model	the polr-Object generated with polr()
by.var	OPTIONAL if set to true, the tests are made for each variable instead of each coefficient. Default: FALSE.

Details

The function calculates the brant test for parallel regression assumption. The brant test was published by Brant (1990). The function works with models generated with the function polr() from the package 'MASS'.

Value

The output is the brant test, which shows if the parallel assumption holds or not.

Author(s)

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References

Brant, R. (1990) Assessing proportionality in the proportional odds model for ordinal logistic regression. *Biometrics*, **46**, 1171–1178.

Examples

```
data = MASS::survey
data$Smoke = ordered(MASS::survey$Smoke, levels=c("Never", "Occas", "Regul", "Heavy"))
model1 = MASS::polr(Smoke ~ Sex + Height, data=data, Hess=TRUE)
summary(model1)
brant(model1)
```

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*Topic **models, brant, brant test,
parallel regression
assumption, ordinal logit**
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