Package 'lin.eval'

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Type Package

Title Perform Polynomial Evaluation of Linearity

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Description Evaluates whether the relationship between two vectors is linear or nonlinear. Performs a test to determine how well a linear model fits the data compared to higher order polynomial models. Jhang et al. (2004) <doi:10.1043/1543-2165(2004)128%3C44:EOLITC%3E2.0.CO;2>.

Imports broom

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Encoding UTF-8

LazyData true

RoxygenNote 6.1.1

Suggests knitr

VignetteBuilder knitr

NeedsCompilation no

Repository CRAN

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R topics documented:

`calculate_adl` *Computes average deviation from linearity adl.*

Description

Computes average deviation from linearity adl.

Usage

```
calculate_adl(predicted.poly, predicted.lm)
```

Arguments

`predicted.poly`	vector of predicted values from best-fitting polynomial model
`predicted.lm`	vector of predicted values from linear model

Value

value for average deviation from linearity as a percentage

`poly_eval` *Establishes if relationship between two vectors is linear or nonlinear. Does not return any value. Prints details of the relationship between x and y.*

Description

Establishes if relationship between two vectors is linear or nonlinear. Does not return any value. Prints details of the relationship between x and y.

Usage

```
poly_eval(y, x, threshold)
```

Arguments

`y`	vector of response values
`x`	vector of predictor values
`threshold`	optional argument. Threshold percentage value for average deviation from linearity. Defaults to 5.

Examples

```
foo <- c(1000, 4000, 5000, 4500, 3000, 4000, 9000, 11000, 15000, 12000, 7000, 3000)
bar <- c(9914, 40487, 54324, 50044, 34719, 42551, 94871, 118914, 158484, 131348, 78504, 36284)
poly_eval(bar, foo)
```

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