Package ‘lin.eval’

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Type Package
Title Perform Polynomial Evaluation of Linearity
Version 0.1.2
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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
License MIT + file LICENSE
Encoding UTF-8
LazyData true
RoxygenNote 6.1.1
Suggests knitr
VignetteBuilder knitr
NeedsCompilation no
Repository CRAN
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**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

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**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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