Package 'SEofM'

October 12, 2022

Type Package

Title Standard Error of Measurement

Version 0.1.0

Description
To calculate the standard error of measurement (SEM) to assess the observer variability (inter- and intra-observer variation).
The methods used in this package are referenced from Zoran B. Popović (2017) <doi:10.21037/cdt.2017.03.12>.

License GPL-3

Encoding UTF-8

NeedsCompilation no

Author Zhicheng Du [aut, cre, cph],
Yuantao Hao [aut]

Maintainer Zhicheng Du <dgdzc@hotmail.com>

Depends R (>= 3.5.0)

Repository CRAN

Date/Publication 2021-07-15 07:00:02 UTC

R topics documented:

SEM *Standard Error of Measurement*

Description

To calculate the standard error of measurement (SEM) to assess the observer variability.

Usage

```
SEM(subject,measurement,observer,value)
```

Arguments

subject	the index of the subjects, e.g., 1,2,3...;1,2,3...
measurement	the index of the measurements, e.g., 1,1,1...;2,2,2...
observer	the index of the observers, e.g., 1,1,1...;2,2,2...
value	the value of the subjects estimated by the observers using the measurements

Value

SEMintra	SEM for intra-observer variation
SEMinter.fixed	SEM for inter-observer variation
SEMinter.random	SEM for inter-observer variation, which is almost always used than SEMinter.fixed

Note

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

Reference:

1. Zoran B. Popović, James D. Thomas (2017) Assessing observer variability: a user's guide, Cardiovascular Diagnosis and Therapy, 7(3): 317-324, DOI: 10.21037/cdt.2017.03.12

Update:

Version 0.1.0: The first version.

Examples

```
data(SEMSample)
value=SEMSample$value
observer=SEMSample$observer
subject=SEMSample$patient
measurement=SEMSample$measurement
SEM(subject,measurement,observer,value)
```

SEMSample *Sample Data for SEM*

Description

Sample data set of repeated measurements by three observers in 20 patients.

Usage

```
data(SEMSample)
```

Format

A data.frame containing 120 observations of 4 variables.

Source

Zoran B. Popović, James D. Thomas (2017) Assessing observer variability: a user's guide, Cardiovascular Diagnosis and Therapy, 7(3): 317-324, DOI: 10.21037/cdt.2017.03.12

Examples

```
# load the dataset
data(aSAH)
```

Index