

Package ‘IMPACT’

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Title The Impact of Items

Author Nery Sofia Huerta-Pacheco

Maintainer Nery Sofia Huerta-Pacheco <nehuerta@uv.mx>

Depends R(>= 3.0.0)

Description Implement a multivariate analysis of the impact of items to identify a bias in the questionnaire validation of Likert-type scale variables. The items requires considering a null value (category doesn't have tendency). Offering frequency, importance and impact of the items.

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URL <http://www.uv.mx/personal/nehuerta/impact>

Encoding UTF-8

NeedsCompilation no

RoxygenNote 6.0.1

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IMPACT	<i>The Impact of Items</i>
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Description

This function returns an estimation based on the patterns of items.
Introduce a set of categorical data set classified as numerical data.

Usage

```
IMPACT(x, y)
```

Arguments

x	is a data set
y	is a null value

Details

This function returns a multivariate analysis of the impact of items to identify a bias in the questionnaire validation. It estimates the impact of items.

This function takes a set of values produced by the IMPACT. functions returns estimations for each item provided in the input x matrix.

Value

Null.value a null value
 Less.impact values of the item with less impact
 Greater.impact values of the item with greater impact
 Summary.table a summary table with the impact of items

Author(s)

Nery Sofia Huerta-Pacheco

References

Juniper, E. F., Guyatt, G. H., Streiner, D. L., & King, D. R. (1997). Clinical impact versus factor analysis for quality of life questionnaire construction. *Journal of Clinical Epidemiology*, 233-238.

Allen, F., & Locker, D. (2002). A Modified Short Version of the Oral Health Impact Profile for Assessing Health-Related Quality of Life in Edentulous Adults. *The International Journal of Prosthodontics*, 15(5), 446-450.

Lesaffre, E. (2009). *Statistical and methodological aspects of oral health research*. John Wiley & Sons. DOI: 10.1002/9780470744116

Vicente Galindo, E. D. (2011). *Análisis del Impacto frente a Teoría de Respuesta al Ítem (Trabajo Fin de Master)*. Master Universitario en Análisis Avanzado de Datos Multivariantes, Statistics Department, University of Salamanca, Spain.

Examples

```
## Not run:
library(IMPACT)
##Reads a likert-type scale dataset
x<-matrix(c(2, 5, 5, 4, 4, 5, 4, 4, 5, 1, 3, 4, 4, 1, 5, 2, 2, 4, 3, 5,
5, 1, 1, 4, 5, 2, 2, 4, 4, 5, 2, 4, 2, 5, 3, 4, 3, 3, 5, 3,
3, 5, 5, 5, 5, 5, 5, 5, 3, 4, 3, 5, 3, 4, 5, 4, 4, 4, 5,
```

```
4, 1, 2, 2, 3, 1, 1, 3, 2, 5, 3, 2, 1, 5, 2, 2, 4, 1, 5, 1,
2, 4, 4, 4, 3, 5, 5, 4, 2, 2, 4, 3, 5, 2, 4, 5, 4, 4, 1, 5,
4, 1, 2, 3, 3, 1, 2, 5, 4, 5, 4, 3, 1, 4, 1, 3, 4, 2, 4, 2,
4, 1, 2, 3, 4, 1, 1, 4, 4, 5, 3, 3, 1, 1, 1, 4, 4, 2, 4, 1,
5, 1, 3, 3, 4, 5, 3, 5, 4, 5, 4, 4, 2, 5, 2, 4, 4, 4, 4, 4,
4, 4, 2, 3, 1, 3, 2, 3, 3, 1, 1, 2, 4, 1, 5, 2, 2, 3, 3, 4),20,10)
##Put names of variables
colnames(x)<-c(paste("A","-",1:10))
##Declare a null value
y<-3
IMPACT(x,y)

## End(Not run)
```

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