Package 'ZScore'

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Type Package

Title Construcion of an overall score based on MCA

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Depends ca

Description This package creates an overall score which summarizes the assessment of opinion surveys. This score is created by the first dimension coordinates obtained from a multiple correspondece analysis.

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R topics documented:

`ZScore-package` *Construcion of an overall score based on MCA.*

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Author(s)

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plot.zscore *Plots the scores of the indvidiuals.*

Description

Plots an histogram and a boxplot that shows the scores obtained by the individuals. When there are outliers it shows the list of this individuals and the score obtained by these individuals

Usage

```
## S3 method for class 'zscore'
plot(x, coord_plot, ...)
```

Arguments

x	An object of type zscore
coord_plot	A logical value indicating wether the plot of the first two dimension coordinates of the MCA want to be shown
...	Furhter arguments (ignored)

summary.zscore *Summary method for zscore object*

Description

The function summary.zscore gives the detailed numerical results of the zscore function. The descriptive analysis and the principal eigenvalue and inertia explained.

Usage

```
## S3 method for class 'zscore'
summary(object, ...)
```

Arguments

object	An object of type zscore
...	Further argumens (ignored)

zscore *Function to construct an overall score from a questionnaire with ranked one dimensional structure in MCA.*

Description

Returns a table with the first dimensional coordinates and weights of the different modalities of each item of the questionaire. From this weights or first coordinates the score of each individual can be easily calculated.

Usage

```
zscore(obj, columns, nr.consider, nr.name)
```

Arguments

obj	The data frame, accepted forms are matrices and data frames.The individuals must be provided in rows and the answers to the items in columns.
columns	An optional parameter specifying the variables that will be used to calculate the index. If the data frame has any additional information the active variables that want to be introduced (the ones we want to work with) in the function have to be specified.
nr.consider	A logical value indicating wether missing values should be kept to calculate the MCA, default is TRUE.
nr.name	A parameter specifying the name of the missing values. If it not specified and the missing values are considered,default name is "missing".

Value

score	This vector contains the scores of each individual. These scores are transformed to an scale from 0 to 100.
modalities	This table shows the order of the modalities of each item.
min	The minimum value of the score.
max	The maximum value of the score.
mean	Mean value of the score.
eig	Eigenvalue obtained in the multiple correspondence analysis.
iner	Percentage of the explained inertia as Benzecri proposes.
MCA_Gut	The output of the mjca function
weights	A table with four columns. In the first column the items are shown as many times as modalities has an item. The second columns shows each modality of the items, the third column shows the first coordinates of MCA for each modality of the items and the fourth column shows the weight of each modality of the items.
not_ordered_mod	When it is the case,the items whose modalities are not ordered are shown.

Note

The usage of the score obtained by this method is recomended just if the Guttman effect is fulfilled by all the items, i.e., if each item's modalities are sorted respect to the first dimension coordinates obtained from the MCA. If one of the items does not meet this criterion, the function will warn the user which one is not satisfying it (also can be checked in not_ordered_mod), in any case the score will be calculated. The order of the items' modalities can be checked in modalities

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