

Package ‘radiant.multivariate’

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Type Package

Title Multivariate Menu for Radiant: Business Analytics using R and Shiny

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Description

The Radiant Multivariate menu includes interfaces for perceptual mapping, factor analysis, cluster analysis, and conjoint analysis. The application extends the functionality in radiant.data.

Depends R (>= 3.3.0),
radiant.data (>= 0.6)

Imports shiny (>= 0.14),
dplyr (>= 0.5),
ggplot2 (>= 2.0.0),
gridExtra (>= 2.0.0),
scales (>= 0.4.0),
magrittr (>= 1.5),
psych (>= 1.5.8),
car (>= 2.1.1),
MASS (>= 7.3),
wordcloud (>= 2.5),
import (>= 1.1.0),
methods

Suggests testthat (>= 1.0.0),
covr (>= 1.2.0)

URL <https://github.com/radiant-rstats/radiant.multivariate>, <https://radiant-rstats.github.io/docs>

BugReports <https://github.com/radiant-rstats/radiant.multivariate/issues>

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LazyData true

RoxygenNote 5.0.1

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carpet

Carpet cleaners

Description

Carpet cleaners

Usage

data(carpet)

Format

A data frame with 18 rows and 5 variables

Details

Rankings reflect the evaluation of 18 alternative carpet cleaners by one respondent. Description provided in `attr(carpet,"description")`

| | |
|------|-----------------------|
| city | <i>City distances</i> |
|------|-----------------------|

Description

City distances

Usage

```
data(city)
```

Format

A data frame with 45 rows and 3 variables

Details

Distance in miles between nine cities in the USA. The dataset is used to illustrate multi-dimensional scaling (MDS). Description provided in `attr(city,"description")`

| | |
|-------|-------------------------|
| city2 | <i>City distances 2</i> |
|-------|-------------------------|

Description

City distances 2

Usage

```
data(city2)
```

Format

A data frame with 78 rows and 3 variables

Details

Distance in miles between 12 cities in the USA. The dataset is used to illustrate multi-dimensional scaling (MDS). Description provided in `attr(city2,"description")`

| | |
|----------------|--------------------------------|
| clean_loadings | <i>Sort and clean loadings</i> |
|----------------|--------------------------------|

Description

Sort and clean loadings

Usage

```
clean_loadings(floadings, cutoff = 0, fsort = FALSE, dec = 8)
```

Arguments

| | |
|-----------|--|
| floadings | Data frame with loadings |
| cutoff | Show only loadings with (absolute) values above cutoff (default = 0) |
| fsort | Sort factor loadings |
| dec | Number of decimals to show |

Details

See https://radiant-rstats.github.io/docs/multivariate/full_factor.html for an example in Radiant

Examples

```
result <- full_factor("diamonds",c("price","carat","table","x","y"))
clean_loadings(result$floadings, TRUE, .5, 2)
```

| | |
|----------|--|
| computer | <i>Perceptions of computer (re)sellers</i> |
|----------|--|

Description

Perceptions of computer (re)sellers

Usage

```
data(computer)
```

Format

A data frame with 5 rows and 8 variables

Details

Perceptions of computer (re)sellers. The dataset is used to illustrate perceptual maps. Description provided in attr(computer,"description")

| | |
|----------|--------------------------|
| conjoint | <i>Conjoint analysis</i> |
|----------|--------------------------|

Description

Conjoint analysis

Usage

```
conjoint(dataset, rvar, evar, reverse = FALSE, data_filter = "")
```

Arguments

| | |
|-------------|--|
| dataset | Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant |
| rvar | The response variable (e.g., profile ratings) |
| evar | Explanatory variables in the regression |
| reverse | Reverse the values of the response variable ('rvar') |
| data_filter | Expression entered in, e.g., Data > View to filter the dataset in Radiant. The expression should be a string (e.g., "price > 10000") |

Details

See <https://radiant-rstats.github.io/docs/multivariate/conjoint.html> for an example in Radiant

Value

A list with all variables defined in the function as an object of class `conjoint`

See Also

[summary.conjoint](#) to summarize results

[plot.conjoint](#) to plot results

Examples

```
result <- conjoint("mp3", rvar = "Rating", evar = "Memory:Shape")
result <- mp3 %>% conjoint(rvar = "Rating", evar = "Memory:Shape")
```

| | |
|-------------|------------------------------|
| full_factor | <i>Factor analysis (PCA)</i> |
|-------------|------------------------------|

Description

Factor analysis (PCA)

Usage

```
full_factor(dataset, vars, method = "PCA", nr_fact = 1,
  rotation = "varimax", data_filter = "")
```

Arguments

| | |
|-------------|--|
| dataset | Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant |
| vars | Variables to include in the analysis |
| method | Factor extraction method to use |
| nr_fact | Number of factors to extract |
| rotation | Apply varimax rotation or no rotation ("varimax" or "none") |
| data_filter | Expression entered in, e.g., Data > View to filter the dataset in Radiant. The expression should be a string (e.g., "price > 10000") |

Details

See https://radiant-rstats.github.io/docs/multivariate/full_factor.html for an example in Radiant

Value

A list with all variables defined in the function as an object of class `full_factor`

See Also

`summary.full_factor` to summarize results

`plot.full_factor` to plot results

Examples

```
result <- full_factor("diamonds",c("price","carat","table","x","y"))
result <- full_factor("diamonds",c("price","carat","table","x","y"), method = "maxlik")
result <- diamonds %>% full_factor(c("price","carat","table","x","y"), method = "maxlik")
```

| | |
|-----------|--------------------------------------|
| hier_clus | <i>Hierarchical cluster analysis</i> |
|-----------|--------------------------------------|

Description

Hierarchical cluster analysis

Usage

```
hier_clus(dataset, vars, distance = "sq.euclidian", method = "ward.D",  
           max_cases = 1000, data_filter = "")
```

Arguments

| | |
|-------------|--|
| dataset | Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant |
| vars | Vector of variables to include in the analysis |
| distance | Distance |
| method | Method |
| max_cases | Maximum number of cases allowed (default is 1000) |
| data_filter | Expression entered in, e.g., Data > View to filter the dataset in Radiant. The expression should be a string (e.g., "price > 10000") |

Details

See https://radiant-rstats.github.io/docs/multivariate/hier_clus.html for an example in Radiant

Value

A list of all variables used in `hier_clus` as an object of class `hier_clus`

See Also

`summary.hier_clus` to summarize results

`plot.hier_clus` to plot results

Examples

```
result <- hier_clus("shopping", vars = "v1:v6")
```

| | |
|-------------|---------------------------------|
| kmeans_clus | <i>K-means cluster analysis</i> |
|-------------|---------------------------------|

Description

K-means cluster analysis

Usage

```
kmeans_clus(dataset, vars, hc_init = TRUE, distance = "sq.euclidian",
  method = "ward.D", seed = 1234, nr_clus = 2, data_filter = "")
```

Arguments

| | |
|-------------|--|
| dataset | Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant |
| vars | Vector of variables to include in the analysis |
| hc_init | Use centers from <code>hier_clus</code> as the starting point |
| distance | Distance for <code>hier_clus</code> |
| method | Method for <code>hier_clus</code> |
| seed | Random see to use for <code>kmeans</code> if <code>hc_init</code> is FALSE |
| nr_clus | Number of clusters to extract |
| data_filter | Expression entered in, e.g., Data > View to filter the dataset in Radiant. The expression should be a string (e.g., "price > 10000") |

Details

See https://radiant-rstats.github.io/docs/multivariate/kmeans_clus.html for an example in Radiant

Value

A list of all variables used in `kmeans_clus` as an object of class `kmeans_clus`

See Also

[summary.kmeans_clus](#) to summarize results

[plot.kmeans_clus](#) to plot results

[store.kmeans_clus](#) to add cluster membership to the selected dataset

Examples

```
result <- kmeans_clus("shopping", c("v1:v6"))
```

| | |
|-----|--|
| mds | (Dis)similarity based brand maps (MDS) |
|-----|--|

Description

(Dis)similarity based brand maps (MDS)

Usage

```
mds(dataset, id1, id2, dis, method = "metric", nr_dim = 2, seed = 1234,  
      data_filter = "")
```

Arguments

| | |
|-------------|--|
| dataset | Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant |
| id1 | A character variable or factor with unique entries |
| id2 | A character variable or factor with unique entries |
| dis | A numeric measure of brand dissimilarity |
| method | Apply metric or non-metric MDS |
| nr_dim | Number of dimensions |
| seed | Random seed |
| data_filter | Expression entered in, e.g., Data > View to filter the dataset in Radiant. The expression should be a string (e.g., "price > 10000") |

Details

See <https://radiant-rstats.github.io/docs/multivariate/mds.html> for an example in Radiant

Value

A list of all variables defined in the function as an object of class `mds`

See Also

[summary.mds](#) to summarize results

[plot.mds](#) to plot results

Examples

```
result <- mds("city", "from", "to", "distance")  
summary(result)  
result <- mds("diamonds", "clarity", "cut", "price")  
summary(result)
```

movie

Conjoint data for Movie theaters

Description

Conjoint data for Movie theaters

Usage

```
data(movie)
```

Format

A data frame with 18 rows and 6 variables

Details

Rankings reflect the evaluation of 18 alternative movie theaters by one respondent. Description provided in `attr(movie,"description")`

mp3

Conjoint data for MP3 players

Description

Conjoint data for MP3 players

Usage

```
data(mp3)
```

Format

A data frame with 18 rows and 6 variables

Details

Ratings reflect the evaluation of 18 alternative MP3 players by one respondent. Description provided in `attr(mp3,"description")`

| | |
|---------------|--|
| plot.conjoint | <i>Plot method for the conjoint function</i> |
|---------------|--|

Description

Plot method for the conjoint function

Usage

```
## S3 method for class 'conjoint'
plot(x, plots = "pw", scale_plot = FALSE,
     shiny = FALSE, ...)
```

Arguments

| | |
|------------|---|
| x | Return value from conjoint |
| plots | Show either the part-worth ("pw") or importance-weights ("iw") plot |
| scale_plot | Scale the axes of the part-worth plots to the same range |
| shiny | Did the function call originate inside a shiny app |
| ... | further arguments passed to or from other methods |

Details

See <https://radiant-rstats.github.io/docs/multivariate/conjoint.html> for an example in Radiant

See Also

[conjoint](#) to generate results
[summary.conjoint](#) to summarize results

Examples

```
result <- conjoint(dataset = "mp3", rvar = "Rating", evar = "Memory:Shape")
plot(result, scale_plot = TRUE)
plot(result, plots = "iw")
```

| | |
|------------------|---|
| plot.full_factor | <i>Plot method for the full_factor function</i> |
|------------------|---|

Description

Plot method for the full_factor function

Usage

```
## S3 method for class 'full_factor'
plot(x, shiny = FALSE, ...)
```

Arguments

| | |
|-------|--|
| x | Return value from full_factor |
| shiny | Did the function call originate inside a shiny app |
| ... | further arguments passed to or from other methods |

Details

See https://radiant-rstats.github.io/docs/multivariate/full_factor.html for an example in Radiant

See Also

[full_factor](#) to calculate results
[plot.full_factor](#) to plot results

Examples

```
result <- full_factor("diamonds", c("price", "carat", "table"))
plot(result)
result <- full_factor("computer", "high_end:business")
summary(result)
```

| | |
|----------------|---|
| plot.hier_clus | <i>Plot method for the hier_clus function</i> |
|----------------|---|

Description

Plot method for the hier_clus function

Usage

```
## S3 method for class 'hier_clus'
plot(x, plots = c("scree", "change"), cutoff = 0.05,
     shiny = FALSE, ...)
```

Arguments

| | |
|--------|---|
| x | Return value from hier_clus |
| plots | Plots to return. "change" shows the percentage change in within-cluster heterogeneity as respondents are grouped into different number of clusters, "dendro" shows the dendrogram, "scree" shows a scree plot of within-cluster heterogeneity |
| cutoff | For large datasets plots can take time to render and become hard to interpret. By selection a cutoff point (e.g., 0.05 percent) the initial steps in hierachical cluster analysis are removed from the plot |
| shiny | Did the function call originate inside a shiny app |
| ... | further arguments passed to or from other methods |

Details

See https://radiant-rstats.github.io/docs/multivariate/hier_clus.html for an example in Radiant

See Also

[hier_clus](#) to generate results

[summary.hier_clus](#) to summarize results

Examples

```
result <- hier_clus("shopping", vars = c("v1:v6"))
plot(result, plots = c("change", "scree"), cutoff = .05)
plot(result, plots = "dendro", cutoff = 0)
shopping %>% hier_clus(vars = c("v1:v6")) %>% plot
```

| | |
|------------------|------------------------------------|
| plot.kmeans_clus | <i>Plot method for kmeans_clus</i> |
|------------------|------------------------------------|

Description

Plot method for kmeans_clus

Usage

```
## S3 method for class 'kmeans_clus'
plot(x, plots = "density", shiny = FALSE, ...)
```

Arguments

| | |
|-------|--|
| x | Return value from kmeans_clus |
| plots | One of "density", "bar", or "scatter") |
| shiny | Did the function call originate inside a shiny app |
| ... | further arguments passed to or from other methods |

Details

See https://radiant-rstats.github.io/docs/multivariate/kmeans_clus.html for an example in Radiant

See Also

[kmeans_clus](#) to generate results

[summary.kmeans_clus](#) to summarize results

[store.kmeans_clus](#) to add cluster membership to the selected dataset

Examples

```
result <- kmeans_clus("shopping", vars = c("v1:v6"))
plot(result)
shopping %>% kmeans_clus(, vars = c("v1:v6")) %>% plot
```

plot.mds

*Plot method for the mds function***Description**

Plot method for the mds function

Usage

```
## S3 method for class 'mds'
plot(x, rev_dim = "", fontsz = 1.3, ...)
```

Arguments

| | |
|---------|---|
| x | Return value from mds |
| rev_dim | Flip the axes in plots |
| fontsz | Font size to use in plots |
| ... | further arguments passed to or from other methods |

Details

See <https://radiant-rstats.github.io/docs/multivariate/mds.html> for an example in Radiant

See Also

[mds](#) to calculate results
[summary.mds](#) to plot results

Examples

```
result <- mds("city", "from", "to", "distance")
plot(result)
plot(result, rev_dim = 1:2)
plot(result, rev_dim = 1:2, fontsz = 2)
```

`plot.pmap`*Plot method for the pmap function*

Description

Plot method for the pmap function

Usage

```
## S3 method for class 'pmap'  
plot(x, plots = "", scaling = 2.1, fontsz = 1.3, ...)
```

Arguments

| | |
|----------------------|--|
| <code>x</code> | Return value from pmap |
| <code>plots</code> | Components to include in the plot ("brand", "attr"). If data on preferences is available use "pref" to add preference arrows to the plot |
| <code>scaling</code> | Arrow scaling in the brand map |
| <code>fontsz</code> | Font size to use in plots |
| <code>...</code> | further arguments passed to or from other methods |

Details

See <https://radiant-rstats.github.io/docs/multivariate/pmap.html> for an example in Radiant

See Also

[pmap](#) to calculate results
[summary.pmap](#) to plot results

Examples

```
result <- pmap("computer", "brand", "high_end:business")  
plot(result, plots = "brand")  
plot(result, plots = c("brand", "attr"))  
plot(result, plots = c("brand", "attr"))  
plot(result, scaling = 1, plots = c("brand", "attr"))  
result <- pmap("computer", "brand", "high_end:dated",  
              pref = c("innovative", "business"))  
plot(result, plots = c("brand", "attr", "pref"))
```

| | |
|-----------------|--|
| plot.pre_factor | <i>Plot method for the pre_factor function</i> |
|-----------------|--|

Description

Plot method for the pre_factor function

Usage

```
## S3 method for class 'pre_factor'
plot(x, plots = c("scree", "change"), cutoff = 0.2,
     shiny = FALSE, ...)
```

Arguments

| | |
|--------|---|
| x | Return value from pre_factor |
| plots | Plots to return. "change" shows the change in eigenvalues as variables are grouped into different number of factors, "scree" shows a scree plot of eigenvalues |
| cutoff | For large datasets plots can take time to render and become hard to interpret. By selection a cutoff point (e.g., eigenvalues of .8 or higher) factors with the least explanatory power are removed from the plot |
| shiny | Did the function call originate inside a shiny app |
| ... | further arguments passed to or from other methods |

Details

See https://radiant-rstats.github.io/docs/multivariate/pre_factor.html for an example in Radiant

See Also

[pre_factor](#) to calculate results
[summary.pre_factor](#) to summarize results

Examples

```
result <- pre_factor("diamonds", c("price", "carat", "table"))
plot(result)
plot(result, plots = c("change", "scree"), cutoff = .05)
```

pmap

Attribute based brand maps

Description

Attribute based brand maps

Usage

```
pmap(dataset, brand, attr, pref = "", nr_dim = 2, data_filter = "")
```

Arguments

| | |
|-------------|--|
| dataset | Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant |
| brand | A character variable with brand names |
| attr | Names of numeric variables |
| pref | Names of numeric brand preference measures |
| nr_dim | Number of dimensions |
| data_filter | Expression entered in, e.g., Data > View to filter the dataset in Radiant. The expression should be a string (e.g., "price > 10000") |

Details

See <https://radiant-rstats.github.io/docs/multivariate/pmap.html> for an example in Radiant

Value

A list of all variables defined in the function as an object of class `pmap`

See Also

[summary.pmap](#) to summarize results

[plot.pmap](#) to plot results

Examples

```
result <- pmap("computer", "brand", "high_end:business")
```

| | |
|------------|---|
| pre_factor | <i>Evaluate if data are appropriate for PCA / Factor analysis</i> |
|------------|---|

Description

Evaluate if data are appropriate for PCA / Factor analysis

Usage

```
pre_factor(dataset, vars, data_filter = "")
```

Arguments

| | |
|-------------|--|
| dataset | Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant |
| vars | Variables to include in the analysis |
| data_filter | Expression entered in, e.g., Data > View to filter the dataset in Radiant. The expression should be a string (e.g., "price > 10000") |

Details

See https://radiant-rstats.github.io/docs/multivariate/pre_factor.html for an example in Radiant

Value

A list with all variables defined in the function as an object of class `pre_factor`

See Also

[summary.pre_factor](#) to summarize results

[plot.pre_factor](#) to plot results

Examples

```
result <- pre_factor("diamonds",c("price","carat","table"))
```

| | |
|----------------------|-----------------------------|
| radiant.multivariate | <i>radiant.multivariate</i> |
|----------------------|-----------------------------|

Description

radiant.multivariate

Launch Radiant in the default browser

Usage

```
radiant.multivariate()
```

Details

See <https://radiant-rstats.github.io/docs> for documentation and tutorials

`radiant.multivariate-deprecated`

Deprecated function(s) in the `radiant.multivariate` package

Description

These functions are provided for compatibility with previous versions of `radiant`. They will eventually be removed.

Usage

```
save_factors(...)
```

Arguments

... Parameters to be passed to the updated functions

Details

`save_factors` is now a synonym for `store.full_factor`
`save_membership` is now a synonym for `store.kmeans_clus`

`retailers`

Perceptions of retailers

Description

Perceptions of retailers

Usage

```
data(retailers)
```

Format

A data frame with 6 rows and 10 variables

Details

Consumer evaluations for a set of retailers in the Chicago area on 7 attributes. The dataset is used to illustrate perceptual maps. Description provided in `attr(retailers, "description")`

| | |
|----------|---------------------------|
| shopping | <i>Shopping attitudes</i> |
|----------|---------------------------|

Description

Shopping attitudes

Usage

```
data(shopping)
```

Format

A data frame with 20 rows and 7 variables

Details

Attitudinal data on shopping for 20 consumers. Description provided in `attr(shopping, "description")`

| | |
|-------------------|--|
| store.full_factor | <i>Store factor scores to active dataset</i> |
|-------------------|--|

Description

Store factor scores to active dataset

Usage

```
## S3 method for class 'full_factor'  
store(object, ..., name = "")
```

Arguments

| | |
|--------|--|
| object | Return value from <code>full_factor</code> |
| ... | Additional arguments |
| name | Name of factor score variables |

Details

See https://radiant-rstats.github.io/docs/multivariate/full_factor.html for an example in Radiant

See Also

`full_factor` to generate results
`summary.full_factor` to summarize results
`plot.full_factor` to plot results

Examples

```
full_factor(shopping, "v1:v6", nr_fact = 3) %>%
  store %>%
  head
```

| | |
|-------------------|--|
| store.kmeans_clus | <i>Add a cluster membership variable to the active dataset</i> |
|-------------------|--|

Description

Add a cluster membership variable to the active dataset

Usage

```
## S3 method for class 'kmeans_clus'
store(object, ..., name = "")
```

Arguments

| | |
|--------|---|
| object | Return value from kmeans_clus |
| ... | Additional arguments |
| name | Name of cluster membership variable |

Details

See https://radiant-rstats.github.io/docs/multivariate/kmeans_clus.html for an example in Radiant

See Also

[kmeans_clus](#) to generate results
[summary.kmeans_clus](#) to summarize results
[plot.kmeans_clus](#) to plot results

Examples

```
kmeans_clus(shopping, vars = c("v1:v6")) %>% store %>% head
```

| | |
|------------------|---|
| summary.conjoint | <i>Summary method for the conjoint function</i> |
|------------------|---|

Description

Summary method for the conjoint function

Usage

```
## S3 method for class 'conjoint'
summary(object, mc_diag = FALSE, dec = 3, ...)
```

Arguments

| | |
|---------|---|
| object | Return value from conjoint |
| mc_diag | Shows multicollinearity diagnostics. |
| dec | Number of decimals to show |
| ... | further arguments passed to or from other methods |

Details

See <https://radiant-rstats.github.io/docs/multivariate/conjoint.html> for an example in Radiant

See Also

[conjoint](#) to generate results
[plot.conjoint](#) to plot results

Examples

```
result <- conjoint("mp3", rvar = "Rating", evar = "Memory:Shape")
summary(result, mc_diag = TRUE)
mp3 %>% conjoint(rvar = "Rating", evar = "Memory:Shape") %>% summary(., mc_diag = TRUE)
```

| | |
|---------------------|--|
| summary.full_factor | <i>Summary method for the full_factor function</i> |
|---------------------|--|

Description

Summary method for the full_factor function

Usage

```
## S3 method for class 'full_factor'
summary(object, cutoff = 0, fsort = FALSE, dec = 2,
  ...)
```

Arguments

| | |
|--------|--|
| object | Return value from full_factor |
| cutoff | Show only loadings with (absolute) values above cutoff (default = 0) |
| fsort | Sort factor loadings |
| dec | Number of decimals to show |
| ... | further arguments passed to or from other methods |

Details

See https://radiant-rstats.github.io/docs/multivariate/full_factor.html for an example in Radiant

See Also

[full_factor](#) to calculate results

[plot.full_factor](#) to plot results

Examples

```
result <- full_factor("diamonds",c("price","carat","depth","table","x"))
summary(result)
summary(result, cutoff = 0, fsort = FALSE)
summary(result, cutoff = 0, fsort = TRUE)
summary(result, cutoff = .5, fsort = TRUE)
diamonds %>% full_factor(c("price","carat","depth","table","x")) %>% summary
diamonds %>% full_factor(c("price","carat","depth","table","x")) %>% summary(cutoff = .5)
```

| | |
|-------------------|--|
| summary.hier_clus | <i>Summary method for the hier_clus function</i> |
|-------------------|--|

Description

Summary method for the hier_clus function

Usage

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

Arguments

| | |
|--------|---|
| object | Return value from hier_clus |
| ... | further arguments passed to or from other methods |

Details

See https://radiant-rstats.github.io/docs/multivariate/hier_clus.html for an example in Radiant

See Also

[hier_clus](#) to generate results
[plot.hier_clus](#) to plot results

Examples

```
result <- hier_clus("shopping", vars = c("v1:v6"))
summary(result)
```

| | |
|---------------------|---------------------------------------|
| summary.kmeans_clus | <i>Summary method for kmeans_clus</i> |
|---------------------|---------------------------------------|

Description

Summary method for kmeans_clus

Usage

```
## S3 method for class 'kmeans_clus'
summary(object, dec = 2, ...)
```

Arguments

| | |
|--------|---|
| object | Return value from kmeans_clus |
| dec | Number of decimals to show |
| ... | further arguments passed to or from other methods |

Details

See https://radiant-rstats.github.io/docs/multivariate/kmeans_clus.html for an example in Radiant

See Also

[kmeans_clus](#) to generate results
[plot.kmeans_clus](#) to plot results
[store.kmeans_clus](#) to add cluster membership to the selected dataset

Examples

```
result <- kmeans_clus("shopping", vars = c("v1:v6"))
summary(result)
shopping %>% kmeans_clus(vars = c("v1:v6"), nr_clus = 3) %>% summary
```

summary.mds*Summary method for the mds function*

Description

Summary method for the mds function

Usage

```
## S3 method for class 'mds'  
summary(object, dec = 2, ...)
```

Arguments

| | |
|--------|--|
| object | Return value from mds |
| dec | Rounding to use for output (default = 2). +1 used for stress measure |
| ... | further arguments passed to or from other methods |

Details

See <https://radiant-rstats.github.io/docs/multivariate/mds.html> for an example in Radiant

See Also

[mds](#) to calculate results
[plot.mds](#) to plot results

Examples

```
result <- mds("city", "from", "to", "distance")  
summary(result)  
summary(result, dec = 2)  
city %>% mds("from", "to", "distance") %>% summary
```

summary.pmap*Summary method for the pmap function*

Description

Summary method for the pmap function

Usage

```
## S3 method for class 'pmap'  
summary(object, cutoff = 0, dec = 2, ...)
```

Arguments

| | |
|--------|--|
| object | Return value from pmap |
| cutoff | Show only loadings with (absolute) values above cutoff (default = 0) |
| dec | Rounding to use for output |
| ... | further arguments passed to or from other methods |

Details

See <https://radiant-rstats.github.io/docs/multivariate/pmap.html> for an example in Radiant

See Also

[pmap](#) to calculate results
[plot.pmap](#) to plot results

Examples

```
result <- pmap("computer", "brand", "high_end:business")
summary(result)
summary(result, cutoff = .3)
result <- pmap("computer", "brand", "high_end:dated", pref = c("innovative", "business"))
summary(result)
computer %>% pmap("brand", "high_end:dated", pref = c("innovative", "business")) %>%
  summary
```

| | |
|--------------------|---|
| summary.pre_factor | <i>Summary method for the pre_factor function</i> |
|--------------------|---|

Description

Summary method for the pre_factor function

Usage

```
## S3 method for class 'pre_factor'
summary(object, dec = 2, ...)
```

Arguments

| | |
|--------|---|
| object | Return value from pre_factor |
| dec | Rounding to use for output |
| ... | further arguments passed to or from other methods |

Details

See https://radiant-rstats.github.io/docs/multivariate/pre_factor.html for an example in Radiant

See Also

[pre_factor](#) to calculate results

[plot.pre_factor](#) to plot results

Examples

```
result <- pre_factor("diamonds", c("price", "carat", "table"))
summary(result)
diamonds %>% pre_factor(c("price", "carat", "table")) %>% summary
result <- pre_factor("computer", "high_end:business")
summary(result)
```

| | |
|-----------|---|
| the_table | <i>Function to calculate the PW and IW table for conjoint</i> |
|-----------|---|

Description

Function to calculate the PW and IW table for conjoint

Usage

```
the_table(model, dat, evar)
```

Arguments

| | |
|-------|---|
| model | Tidied model results (broom) output from conjoint passed on by summary.conjoint |
| dat | Conjoint data |
| evar | Explanatory variables used in the conjoint regression |

Details

See <https://radiant-rstats.github.io/docs/multivariate/conjoint.html> for an example in Radiant

See Also

[conjoint](#) to generate results

[summary.conjoint](#) to summarize results

[plot.conjoint](#) to plot results

Examples

```
result <- conjoint(dataset = "mp3", rvar = "Rating", evar = "Memory:Shape")
the_table(result$model, result$dat, result$evar)
```

| | |
|------------|-----------------------------|
| toothpaste | <i>Toothpaste attitudes</i> |
|------------|-----------------------------|

Description

Toothpaste attitudes

Usage

```
data(toothpaste)
```

Format

A data frame with 60 rows and 10 variables

Details

Attitudinal data on toothpaste for 60 consumers. Description provided in `attr(toothpaste,"description")`

| | |
|----------|--------------------------|
| tpbrands | <i>Toothpaste brands</i> |
|----------|--------------------------|

Description

Toothpaste brands

Usage

```
data(tpbrands)
```

Format

A data frame with 45 rows and 4 variables

Details

Perceived (dis)similarity of a set of toothpaste brands. The dataset is used to illustrate multi-dimensional scaling (MDS). Description provided in `attr(tpbrands,"description")`

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