# Package 'radiant.multivariate'

September 19, 2016

Type Package
Title Multivariate Menu for Radiant: Business Analytics using R and Shiny
Version 0.6.0
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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.
<b>Depends</b> 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
<b>Suggests</b> testthat (>= 1.0.0), covr (>= 1.2.0)
<pre>URL https://github.com/radiant-rstats/radiant.multivariate, https:     //radiant-rstats.github.io/docs</pre>
BugReports https://github.com/radiant-rstats/radiant.multivariate/issues License AGPL-3   file LICENSE 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

city 3

#### **Details**

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

city

City distances

### 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

City distances 2

### 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")

4 computer

clean\_loadings

Sort and clean loadings

### **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)</pre>
```

computer

Perceptions of computer (re)sellers

#### **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 5

joint Conjoint analysis
-------------------------

### 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 r_data 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
```

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

6 full\_factor

full_factor	Factor analysis (PCA)	

### 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 r_data 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
```

```
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")
```

7 hier\_clus

S Hierarchical cluster analysis
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### 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 a element in an r_data 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 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 exam-
ple 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
```

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

8 kmeans\_clus

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kmeans_	clus	

K-means cluster analysis

#### 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 r_data list from Radiant
vars	Vector of variables to include in the analysis
hc_init	Use centers from hier_clus as the starting point
distance	Distance for hier_clus
method	Method for hier_clus
seed	Random see to use for kmeans if hc_init 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
```

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

mds 9

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 $r$ _data 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
```

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

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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 11

plot.conjoint	Plot method for the conjoint function
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#### **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")</pre>
```

```
plot.full_factor
```

Plot method for the full\_factor function

### **Description**

Plot method for the full\_factor function

### Usage

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

12 plot.hier\_clus

### **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)</pre>
```

plot.hier\_clus

Plot method for the hier\_clus function

### 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

х	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 hierarchical 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

plot.kmeans\_clus 13

#### **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

Plot method for kmeans\_clus

### Description

Plot method for kmeans\_clus

### Usage

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

#### **Arguments**

Χ	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
```

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#### **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
```

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

plot.pmap 15

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$\nu_{\perp}$	o.	piliap	

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**

x	Return value from pmap
plots	Components to include in the plot ("brand", "attr"). If data on preferences is available use "pref" to add preference arrows to the plot
scaling	Arrow scaling in the brand map
fontsz	Font size to use in plots
	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
```

plot.pre\_factor

nlot	nro	factor
DIOL	. bre	Tactor

Plot method for the pre\_factor function

### 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
```

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

pmap 17

ртар	Attribute based brand maps	
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#### **Description**

Attribute based brand maps

#### Usage

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

### Arguments

	This can be a dataframe	
dataset		

element in an r\_data 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

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
```

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

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	_		
pre_	†a	ct	or

Evaluate if data are appropriate for PCA / Factor analysis

#### **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 r\_data list from Radiant

vars Variables to include in the analysis

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"))</pre>
```

```
radiant.multivariate radiant.multivariate
```

#### **Description**

radiant.multivariate

Launch Radiant in the default browser

#### Usage

```
radiant.multivariate()
```

retailers 19

#### **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")

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shopping

Shopping attitudes

### 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

Store factor scores to active dataset

### **Description**

Store factor scores to active dataset

#### Usage

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

#### **Arguments**

object Return value from full\_factor

... 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
```

store.kmeans\_clus 21

#### **Examples**

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

store.kmeans\_clus

Add a cluster membership variable to the active dataset

### 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
```

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

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summary.conjoint

Summary method for the conjoint function

#### **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

Summary method for the full\_factor function

#### Description

Summary method for the full\_factor function

### Usage

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

summary.hier\_clus 23

#### **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

Summary method for the hier\_clus function

#### **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)</pre>
```

summary.kmeans\_clus

Summary method for kmeans\_clus

### **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
```

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

summary.mds 25

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, ...)
```

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#### **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

Summary method for the pre\_factor function

#### **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  $https://radiant-rstats.github.io/docs/multivariate/pre\_factor.html \ for \ an \ example in Radiant$ 

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#### 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)</pre>
```

the\_table

Function to calculate the PW and IW table for conjoint

### 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
```

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

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toothpaste

Toothpaste attitudes

### 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

Toothpaste brands

### 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 multidimensional scaling (MDS). Description provided in attr(tpbrands, "description")

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