

# Package ‘radiant.multivariate’

June 23, 2016

**Type** Package

**Title** Multivariate analysis menu for Radiant. Builds on the radiant.data package

**Version** 0.1.0

**Date** 2016-6-3

**Description** Multivariate analysis menu for Radiant.

**Depends** R (>= 3.2.0),  
radiant.data (>= 0.5)

**Imports** shiny (>= 0.13.2.9003),  
dplyr (>= 0.4.3),  
ggplot2 (>= 2.0.0),  
gridExtra (>= 2.0.0),  
scales (>= 0.3.0),  
magrittr (>= 1.5),  
broom (>= 0.4.0),  
psych (>= 1.5.8),  
car (>= 2.1.1),  
MASS (>= 7.3),  
wordcloud (>= 2.5),  
import (>= 1.1.0),  
methods

**Suggests** devtools (>= 1.8.0),  
testthat (>= 0.10.0),  
covr (>= 1.2.0)

**URL** <https://github.com/radiant-rstats/radiant.multivariate>, <http://vnijs.github.io/radiant/>

**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

**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>
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---

**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 [http://vnijs.github.io/radiant/marketing/full\\_factor.html](http://vnijs.github.io/radiant/marketing/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>
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---

**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 <http://vnijs.github.io/radiant/marketing/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 [http://vnijs.github.io/radiant/marketing/full\\_factor.html](http://vnijs.github.io/radiant/marketing/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*Hierarchical cluster analysis*

---

**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 [http://vnijs.github.io/radiant/marketing/hier\\_clus.html](http://vnijs.github.io/radiant/marketing/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>
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---

## 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 [http://vnijs.github.io/radiant/marketing/kmeans\\_clus.html](http://vnijs.github.io/radiant/marketing/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., <code>Data &gt; View</code> to filter the dataset in Radiant. The expression should be a string (e.g., <code>"price &gt; 10000"</code> )

## Details

See <http://vnijs.github.io/radiant/marketing/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	<i>Conjoint data for Movie theaters</i>
-------	---

---

**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	<i>Conjoint data for MP3 players</i>
-----	--------------------------------------

---

**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 <a href="#">conjoint</a>
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 <http://vnijs.github.io/radiant/marketing/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 <a href="#">full_factor</a>
shiny	Did the function call originate inside a shiny app
...	further arguments passed to or from other methods

**Details**

See [http://vnijs.github.io/radiant/marketing/full\\_factor.html](http://vnijs.github.io/radiant/marketing/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 <a href="#">hier_clus</a>
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

**Details**

See [http://vnijs.github.io/radiant/marketing/hier\\_clus.html](http://vnijs.github.io/radiant/marketing/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 <a href="#">kmeans_clus</a>
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 [http://vnijs.github.io/radiant/marketing/kmeans\\_clus.html](http://vnijs.github.io/radiant/marketing/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	<i>Plot method for the mds function</i>
----------	---

---

**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 <a href="#">mds</a>
rev_dim	Flip the axes in plots
fontsz	Font size to use in plots
...	further arguments passed to or from other methods

**Details**

See <http://vnijs.github.io/radiant/marketing/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	<i>Plot method for the pmap function</i>
-----------	--

---

**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 <a href="#">pmap</a>
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 <http://vnijs.github.io/radiant/marketing/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 <a href="#">pre_factor</a>
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 [http://vnijs.github.io/radiant/marketing/pre\\_factor.html](http://vnijs.github.io/radiant/marketing/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	<i>Attribute based brand maps</i>
------	-----------------------------------

---

### 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 <http://vnijs.github.io/radiant/marketing/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 r_data 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 [http://vnijs.github.io/radiant/marketing/pre\\_factor.html](http://vnijs.github.io/radiant/marketing/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 <http://vnijs.github.io/radiant> 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 [http://vnijs.github.io/radiant/marketing/full\\_factor.html](http://vnijs.github.io/radiant/marketing/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 <a href="#">kmeans_clus</a>
...	Additional arguments
name	Name of cluster membership variable

**Details**

See [http://vnijs.github.io/radiant/marketing/kmeans\\_clus.html](http://vnijs.github.io/radiant/marketing/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 <a href="#">conjoint</a>
mc_diag	Shows multicollinearity diagnostics.
dec	Number of decimals to show
...	further arguments passed to or from other methods

**Details**

See <http://vnijs.github.io/radiant/marketing/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 <a href="#">full_factor</a>
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 [http://vnijs.github.io/radiant/marketing/full\\_factor.html](http://vnijs.github.io/radiant/marketing/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 <a href="#">hier_clus</a>
...	further arguments passed to or from other methods

**Details**

See [http://vnijs.github.io/radiant/marketing/hier\\_clus.html](http://vnijs.github.io/radiant/marketing/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 <a href="#">kmeans_clus</a>
dec	Number of decimals to show
...	further arguments passed to or from other methods

**Details**

See [http://vnijs.github.io/radiant/marketing/kmeans\\_clus.html](http://vnijs.github.io/radiant/marketing/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 <a href="#">mds</a>
dec	Rounding to use for output (default = 2). +1 used for stress measure
...	further arguments passed to or from other methods

**Details**

See <http://vnijs.github.io/radiant/marketing/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 <a href="#">pmap</a>
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 <http://vnijs.github.io/radiant/marketing/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 <a href="#">pre_factor</a>
dec	Rounding to use for output
...	further arguments passed to or from other methods

**Details**

See [http://vnijs.github.io/radiant/marketing/pre\\_factor.html](http://vnijs.github.io/radiant/marketing/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

---

*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 <code>conjoint</code> passed on by <code>summary.conjoint</code>
dat	Conjoint data
evar	Explanatory variables used in the conjoint regression

**Details**

See <http://vnijs.github.io/radiant/marketing/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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