

# Package ‘surveydata’

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**Title** Tools to Work with Survey Data

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**Description** Data obtained from surveys contains information not only about the survey responses, but also the survey metadata, e.g. the original survey questions and the answer options. The 'surveydata' package makes it easy to keep track of this metadata, and to easily extract columns with specific questions.

**URL** <https://github.com/andrie/surveydata>,  
<https://andrie.github.io/surveydata>

**BugReports** <https://github.com/andrie/surveydata/issues>

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surveydata-package      *Tools, classes and methods to manipulate survey data.*

---

**Description**

Tools, classes and methods to manipulate survey data.

## Details

Surveydata objects have been designed to function with SPSS export data, i.e. the result of an SPSS import, `foreign::read.spss()`. This type of data is contained in a `data.frame`, with information about the questionnaire text in the `variable.labels` attribute. Surveydata objects keep track of the variable labels, by offering methods for renaming, subsetting, etc.

Coercion functions:

- `as.surveydata()`
- `is.surveydata()`
- `as.data.frame.surveydata()`

To access and modify attributes:

- `pattern()`
- `varlabels()`

To subset or merge surveydata objects:

- `merge()`
- `Extract()`
- `cbind.surveydata()`

To extract question text from varlabels:

- `question_text()`
- `question_text_common()`
- `question_text_unique()`

To fix common encoding problems:

- `encToInt()`
- `intToEnc()`
- `fix_common_encoding_problems()`

To clean data:

- `remove_dont_know()` to remove "Don't know" responses
- `remove_all_dont_know()` to remove "Don't know" responses from all questions
- `fix_levels_01()` to fix level formatting of all question with Yes/No type answers

Miscellaneous tools:

- `dropout()` to determine questions where respondents drop out

## Author(s)

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## Examples

```
library(surveydata)

# Create surveydata object

sdatt <- data.frame(
  id = 1:4,
  Q1 = c("Yes", "No", "Yes", "Yes"),
  Q4_1 = c(1, 2, 1, 2),
  Q4_2 = c(3, 4, 4, 3),
  Q4_3 = c(5, 5, 6, 6),
  Q10 = factor(c("Male", "Female", "Female", "Male")),
  crossbreak = c("A", "A", "B", "B"),
  weight = c(0.9, 1.1, 0.8, 1.2)
)

varlabels(sdatt) <- c(
  "RespID",
  "Question 1",
  "Question 4: red", "Question 4: green", "Question 4: blue",
  "Question 10",
  "crossbreak",
  "weight"
)

sv <- as.surveydata(sdatt, renameVarlabels = TRUE)

# Extract specific questions
sv[, "Q1"]
sv[, "Q4"]

# Query attributes
varlabels(sv)
pattern(sv)

# Find unique questions
questions(sv)
which.q(sv, "Q1")
which.q(sv, "Q4")

# Find question text
question_text(sv, "Q1")
question_text(sv, "Q4")

question_text_common(sv, "Q4")
question_text_unique(sv, "Q4")

# Basic operations on a surveydata object, illustrated with the example dataset membersurvey
class(membersurvey)
```

```
questions(membersurvey)

which.q(membersurvey, "Q1")
which.q(membersurvey, "Q3")
which.q(membersurvey, c("Q1", "Q3"))

question_text(membersurvey, "Q3")
question_text_unique(membersurvey, "Q3")
question_text_common(membersurvey, "Q3")

# Extracting columns from a surveydata object

head(membersurvey[, "Q1"])
head(membersurvey["Q1"])
head(membersurvey[, "Q3"])
head(membersurvey[, c("Q1", "Q3")])

# Note that the result is always a surveydata object, even if only one column is extracted

head(membersurvey[, "id"])
str(membersurvey[, "id"])
```

---

```
as.data.frame.surveydata
```

*Coerces surveydata object to data.frame.*

---

## Description

Coerces surveydata object to data.frame.

## Usage

```
## S3 method for class 'surveydata'
as.data.frame(x, ..., rm.pattern = FALSE)
```

## Arguments

x	Surveydata object to coerce to class data.frame
...	ignored
rm.pattern	If TRUE removes <code>pattern()</code> attributes from x

## See Also

[surveydata-package](#)

---

as.surveydata                    *Coercion from and to surveydata.*

---

## Description

Methods for creating surveydata objects, testing for class, and coercion from other objects.

## Usage

```
as.surveydata(  
  x,  
  sep = "_",  
  exclude = "other",  
  ptn = pattern(x),  
  defaultPtn = list(sep = sep, exclude = exclude),  
  renameVarlabels = FALSE  
)  
  
un_surveydata(x)
```

## Arguments

x	Object to coerce to surveydata
sep	Separator between question and sub-question names
exclude	Excludes from pattern search
ptn	A list with two elements, sep and exclude. See <a href="#">pattern()</a> and <a href="#">which.q()</a> for more detail.
defaultPtn	The default for ptn, if it doesn't exist in the object that is being coerced.
renameVarlabels	If TRUE, turns variable.labels attribute into a named vector, using names(x) as names.

## Details

The function `un_surveydata()` removes the surveydata class from the object, leaving intact the other classes, e.g. `data.frame` or `tibble`

## See Also

[surveydata-package](#), [is.surveydata\(\)](#)

**Examples**

```
library(surveydata)

# Create surveydata object

sdatt <- data.frame(
  id = 1:4,
  Q1 = c("Yes", "No", "Yes", "Yes"),
  Q4_1 = c(1, 2, 1, 2),
  Q4_2 = c(3, 4, 4, 3),
  Q4_3 = c(5, 5, 6, 6),
  Q10 = factor(c("Male", "Female", "Female", "Male")),
  crossbreak = c("A", "A", "B", "B"),
  weight = c(0.9, 1.1, 0.8, 1.2)
)

varlabels(sdatt) <- c(
  "RespID",
  "Question 1",
  "Question 4: red", "Question 4: green", "Question 4: blue",
  "Question 10",
  "crossbreak",
  "weight"
)

sv <- as.surveydata(sdatt, renameVarlabels = TRUE)

# Extract specific questions
sv[, "Q1"]
sv[, "Q4"]

# Query attributes
varlabels(sv)
pattern(sv)

# Find unique questions
questions(sv)
which.q(sv, "Q1")
which.q(sv, "Q4")

# Find question text
question_text(sv, "Q1")
question_text(sv, "Q4")

question_text_common(sv, "Q4")
question_text_unique(sv, "Q4")

# Basic operations on a surveydata object, illustrated with the example dataset membersurvey
class(membersurvey)
```

```
questions(membersurvey)

which.q(membersurvey, "Q1")
which.q(membersurvey, "Q3")
which.q(membersurvey, c("Q1", "Q3"))

question_text(membersurvey, "Q3")
question_text_unique(membersurvey, "Q3")
question_text_common(membersurvey, "Q3")

# Extracting columns from a surveydata object

head(membersurvey[, "Q1"])
head(membersurvey["Q1"])
head(membersurvey[, "Q3"])
head(membersurvey[, c("Q1", "Q3")])

# Note that the result is always a surveydata object, even if only one column is extracted

head(membersurvey[, "id"])
str(membersurvey[, "id"])
```

---

as\_opentext\_datatable *Converts free format question text to datatable using the DT package.*

---

## Description

Converts free format question text to datatable using the DT package.

## Usage

```
as_opentext_datatable(data, q)
```

## Arguments

data	surveydata object
q	Question

## See Also

Other open text functions: [print\\_opentext\(\)](#)

## Examples

```
as_opentext_datatable(membersurvey, "Q33")
```



---

cbind.surveydata	<i>Combines surveydata object by columns.</i>
------------------	---

---

**Description**

Combines surveydata object by columns.

**Usage**

```
## S3 method for class 'surveydata'
cbind(..., deparse.level = 1)
```

**Arguments**

...	surveydata objects
deparse.level	ignored

---

dropout	<i>Calculates at which questions respondents drop out.</i>
---------	--

---

**Description**

The number of respondents for each question is calculated as the length of the vector, after omitting NA values.

**Usage**

```
dropout(x, summary = TRUE)
```

**Arguments**

x	surveydata object, list or data.frame
summary	If TRUE, returns a shortened vector that contains only the points where respondents drop out. Otherwise, returns the number of respondents for each question.

**Value**

Named numeric vector of respondent counts

**Examples**

```
dropout(membersurvey[-(127:128)])
```

encToInt *Converts a character vector to an integer vector.*

---

### Description

Conversion of character vector to integer vector. The encoding of the character vector can be specified but defaults to the current locale.

### Usage

```
encToInt(x, encoding = localeToCharset())
```

### Arguments

x                    Character vector  
encoding            A character string describing the encoding of x. Defaults to the current locale. See also [iconvlist\(\)](#)

### Value

An integer vector

### See Also

[iconv\(\)](#)

Other Functions to clean data: [fix\\_common\\_encoding\\_problems\(\)](#), [fix\\_levels\\_01\\_spss\(\)](#), [has\\_dont\\_know\(\)](#), [intToEnc\(\)](#), [leveltest](#), [remove\\_all\\_dont\\_know\(\)](#), [remove\\_dont\\_know\(\)](#)

### Examples

```
encToInt("\xfa")
```

---

fix\_common\_encoding\_problems

*Fix common encoding problems when working with web imported data.*

---

### Description

This function tries to resolve typical encoding problems when importing web data on Windows. Typical problems occur with pound and emdash (-), especially when these originated in MS-Word.

### Usage

```
fix_common_encoding_problems(x, encoding = localeToCharset())
```

**Arguments**

x	A character vector
encoding	A character string describing the encoding of x. Defaults to the current locale. See also <a href="#">iconvlist()</a>

**See Also**

Other Functions to clean data: [encToInt\(\)](#), [fix\\_levels\\_01\\_spss\(\)](#), [has\\_dont\\_know\(\)](#), [intToEnc\(\)](#), [leveltest](#), [remove\\_all\\_dont\\_know\(\)](#), [remove\\_dont\\_know\(\)](#)

---

fix_levels_01_spss	<i>Fix level formatting of all question with Yes/No type answers.</i>
--------------------	---

---

**Description**

Fix level formatting of all question with Yes/No type answers.

**Usage**

```
fix_levels_01_spss(dat)
```

```
fix_levels_01_r(dat)
```

```
fix_levels_01(dat, origin = c("R", "SPSS"))
```

**Arguments**

dat	surveydata object
origin	Either R or SPSS

**See Also**

Other Functions to clean data: [encToInt\(\)](#), [fix\\_common\\_encoding\\_problems\(\)](#), [has\\_dont\\_know\(\)](#), [intToEnc\(\)](#), [leveltest](#), [remove\\_all\\_dont\\_know\(\)](#), [remove\\_dont\\_know\(\)](#)

---

has_dont_know	<i>Tests whether levels contain "Don't know".</i>
---------------	---

---

**Description**

Returns TRUE if x contains any instances of dk

**Usage**

```
has_dont_know(x, dk = "Don't Know")
```

**Arguments**

x	Character vector or factor
dk	Character vector, containing search terms, e.g. c("Don't know", "Don't Know")

**Value**

TRUE or FALSE

**See Also**

Other Functions to clean data: [encToInt\(\)](#), [fix\\_common\\_encoding\\_problems\(\)](#), [fix\\_levels\\_01\\_spss\(\)](#), [intToEnc\(\)](#), [leveltest](#), [remove\\_all\\_dont\\_know\(\)](#), [remove\\_dont\\_know\(\)](#)

---

intToEnc	<i>Converts an integer vector to a character vector.</i>
----------	--

---

**Description**

Conversion of integer vector to character vector. The encoding of the character vector can be specified but defaults to the current locale.

**Usage**

```
intToEnc(x, encoding = localeToCharset())
```

**Arguments**

x	Integer vector
encoding	A character string describing the encoding of x. Defaults to the current locale. See also <a href="#">iconvlist()</a>

**Value**

A character vector

**See Also**[iconv\(\)](#)

Other Functions to clean data: [encToInt\(\)](#), [fix\\_common\\_encoding\\_problems\(\)](#), [fix\\_levels\\_01\\_spss\(\)](#), [has\\_dont\\_know\(\)](#), [leveltest](#), [remove\\_all\\_dont\\_know\(\)](#), [remove\\_dont\\_know\(\)](#)

**Examples**

```
intToEnc(8212)
```

---

is.surveydata	<i>Tests whether an object is of class surveydata.</i>
---------------	--

---

**Description**

Tests whether an object is of class surveydata.

**Usage**

```
is.surveydata(x)
```

**Arguments**

x	Object to check for being of class surveydata
---	---

**See Also**[surveydata-package](#)


---

lapply_names	<i>Applies function only to named elements of a list.</i>
--------------	---

---

**Description**

This is useful to clean only some columns in a list (or data.frame or surveydata object). This is a simple wrapper around [lapply\(\)](#) where only the named elements are changed.

**Usage**

```
lapply_names(x, names, FUN, ...)
```

**Arguments**

x	list
names	character vector identifying which elements of the list to apply FUN
FUN	function to apply.
...	additional arguments passed to FUN

**See Also**

Other Tools: [question\\_order\(\)](#)

---

leveltest	<i>Fix level formatting of all question with Yes/No type answers.</i>
-----------	---

---

**Description**

Fix level formatting of all question with Yes/No type answers.

**Usage**

```
leveltest_spss(x)
```

```
leveltest_r(x)
```

**Arguments**

x	surveydata object
---	-------------------

**See Also**

Other Functions to clean data: [encToInt\(\)](#), [fix\\_common\\_encoding\\_problems\(\)](#), [fix\\_levels\\_01\\_spss\(\)](#), [has\\_dont\\_know\(\)](#), [intToEnc\(\)](#), [remove\\_all\\_dont\\_know\(\)](#), [remove\\_dont\\_know\(\)](#)

---

membersurvey	<i>Data frame with survey data of member satisfaction survey.</i>
--------------	---

---

**Description**

Data frame with survey data of member satisfaction survey.

**Usage**

```
membersurvey
```

**Format**

data frame

---

merge	<i>Merge surveydata objects.</i>
-------	----------------------------------

---

**Description**

The base R merge will merge data but not all of the attributes. This function also merges the variable.labels attribute.

**Usage**

```
## S3 method for class 'surveydata'  
merge(x, y, ...)
```

**Arguments**

x	surveydata object
y	surveydata object
...	Other parameters passed to <a href="#">merge()</a>

---

print_opentext	<i>Print open text questions.</i>
----------------	-----------------------------------

---

**Description**

Print open text questions.

**Usage**

```
print_opentext(data, q, cat = TRUE)
```

**Arguments**

data	data
q	Question number
cat	If TRUE, prints results using <a href="#">cat()</a>

**See Also**

Other open text functions: [as\\_opentext\\_datatable\(\)](#)

**Examples**

```
print_opentext(membersurvey, "Q33")
```

---

questions	Returns a list of all the unique questions in the surveydata object.
-----------	--

---

### Description

In many survey systems, sub-questions take the form Q1\_a, Q1\_b, with the main question and sub-question separated by an underscore. This function conveniently returns all of the main questions in a `surveydata()` object. It does this by using the `pattern()` attribute of the surveydata object.

### Usage

```
questions(x, ptn = pattern(x))
```

### Arguments

x	Object to coerce to surveydata
ptn	A list with two elements, sep and exclude. See <code>pattern()</code> and <code>which.q()</code> for more detail.

### Value

numeric vector

### See Also

`which.q`

Other Question functions: `question_text_common()`, `question_text_unique()`, `question_text()`, `split_common_unique()`, `which.q()`

### Examples

```
# Basic operations on a surveydata object, illustrated with the example dataset membersurvey

class(membersurvey)

questions(membersurvey)

which.q(membersurvey, "Q1")
which.q(membersurvey, "Q3")
which.q(membersurvey, c("Q1", "Q3"))

question_text(membersurvey, "Q3")
question_text_unique(membersurvey, "Q3")
question_text_common(membersurvey, "Q3")

# Extracting columns from a surveydata object

head(membersurvey[, "Q1"])
```



```

head(membersurvey["Q1"])
head(membersurvey[, "Q3"])
head(membersurvey[, c("Q1", "Q3")])

# Note that the result is always a surveydata object, even if only one column is extracted

head(membersurvey[, "id"])
str(membersurvey[, "id"])

```

---

question_order	<i>Changes vector to ordered factor, adding NA levels if applicable.</i>
----------------	--

---

### Description

Changes vector to ordered factor, adding NA levels if applicable.

### Usage

```
question_order(x)
```

### Arguments

x                    character vector

### See Also

Other Tools: [lapply\\_names\(\)](#)

---

question_text	<i>Returns question text.</i>
---------------	-------------------------------

---

### Description

Given a question id, e.g. "Q4", returns question text for this question. Note that this returns. The functions [question\\_text\\_unique\(\)](#) and [question\\_text\\_common\(\)](#) returns the unique and common components of the question text.

### Usage

```
question_text(x, Q)
```

### Arguments

x                    A surveydata object  
Q                    The question id, e.g. "Q4". If not supplied, returns the text for all questions.

**Value**

character vector

**See Also**

Other Question functions: [question\\_text\\_common\(\)](#), [question\\_text\\_unique\(\)](#), [questions\(\)](#), [split\\_common\\_unique\(\)](#), [which.q\(\)](#)

**Examples**

```
# Basic operations on a surveydata object, illustrated with the example dataset membersurvey

class(membersurvey)

questions(membersurvey)

which.q(membersurvey, "Q1")
which.q(membersurvey, "Q3")
which.q(membersurvey, c("Q1", "Q3"))

question_text(membersurvey, "Q3")
question_text_unique(membersurvey, "Q3")
question_text_common(membersurvey, "Q3")

# Extracting columns from a surveydata object

head(membersurvey[, "Q1"])
head(membersurvey[["Q1"]])
head(membersurvey[, "Q3"])
head(membersurvey[, c("Q1", "Q3")])

# Note that the result is always a surveydata object, even if only one column is extracted

head(membersurvey[, "id"])
str(membersurvey[, "id"])
```

---

`question_text_common` *Returns common element of question text.*

---

**Description**

Given a question id, e.g. "Q4", finds all sub-questions, e.g. "Q4\_1", "Q4\_2", etc, and returns the question text that is common to each.

**Usage**

```
question_text_common(x, Q)
```

**Arguments**

x                    A surveydata object  
 Q                    The question id, e.g. "Q4". If not supplied, returns the text for all questions.

**Value**

character vector

**See Also**

Other Question functions: [question\\_text\\_unique\(\)](#), [question\\_text\(\)](#), [questions\(\)](#), [split\\_common\\_unique\(\)](#), [which.q\(\)](#)

**Examples**

```
# Basic operations on a surveydata object, illustrated with the example dataset membersurvey

class(membersurvey)

questions(membersurvey)

which.q(membersurvey, "Q1")
which.q(membersurvey, "Q3")
which.q(membersurvey, c("Q1", "Q3"))

question_text(membersurvey, "Q3")
question_text_unique(membersurvey, "Q3")
question_text_common(membersurvey, "Q3")

# Extracting columns from a surveydata object

head(membersurvey[, "Q1"])
head(membersurvey[,"Q1"])
head(membersurvey[, "Q3"])
head(membersurvey[, c("Q1", "Q3")])

# Note that the result is always a surveydata object, even if only one column is extracted

head(membersurvey[, "id"])
str(membersurvey[, "id"])
```

---

question\_text\_unique    *Returns unique elements of question text.*

---

**Description**

Given a question id, e.g. "Q4", finds all sub-questions, e.g. Q4\_1, Q4\_2, etc, and returns the question text that is unique to each

**Usage**

```
question_text_unique(x, Q)
```

**Arguments**

x	A surveydata object
Q	The question id, e.g. "Q4". If not supplied, returns the text for all questions.

**Value**

character vector

**See Also**

Other Question functions: [question\\_text\\_common\(\)](#), [question\\_text\(\)](#), [questions\(\)](#), [split\\_common\\_unique\(\)](#), [which.q\(\)](#)

**Examples**

```
# Basic operations on a surveydata object, illustrated with the example dataset membersurvey

class(membersurvey)

questions(membersurvey)

which.q(membersurvey, "Q1")
which.q(membersurvey, "Q3")
which.q(membersurvey, c("Q1", "Q3"))

question_text(membersurvey, "Q3")
question_text_unique(membersurvey, "Q3")
question_text_common(membersurvey, "Q3")

# Extracting columns from a surveydata object

head(membersurvey[, "Q1"])
head(membersurvey["Q1"])
head(membersurvey[, "Q3"])
head(membersurvey[, c("Q1", "Q3")])

# Note that the result is always a surveydata object, even if only one column is extracted

head(membersurvey[, "id"])
str(membersurvey[, "id"])
```

---

remove\_all\_dont\_know *Removes "Do not know" and other similar words from factor levels in data frame.*

---

### Description

Removes "Do not know" and other similar words from factor levels in data frame

### Usage

```
remove_all_dont_know(x, dk = NULL, message = TRUE)
```

### Arguments

x	List or data frame
dk	Character vector, containing search terms, e.g. c("Do not know", "DK"). These terms will be replaced by NA. If NULL, defaults to c("I don't know", "Don't Know", "Don't know", "Dont know", "DK")
message	If TRUE, displays message with the number of instances that were removed.

### Value

A data frame

### See Also

[hasDK\(\)](#) and [removeDK\(\)](#)

Other Functions to clean data: [encToInt\(\)](#), [fix\\_common\\_encoding\\_problems\(\)](#), [fix\\_levels\\_01\\_spss\(\)](#), [has\\_dont\\_know\(\)](#), [intToEnc\(\)](#), [leveltest](#), [remove\\_dont\\_know\(\)](#)

---

remove\_dont\_know *Removes "Don't know" from levels and replaces with NA.*

---

### Description

Tests the levels of x contain any instances of "Don't know". If so, replaces these levels with NA

### Usage

```
remove_dont_know(x, dk = "Don't Know")
```

### Arguments

x	Character vector or factor
dk	Character vector, containing search terms, e.g. c("Don't know", "Don't Know")

**Value**

A factor with "Dont know" removed

**See Also**

Other Functions to clean data: [encToInt\(\)](#), [fix\\_common\\_encoding\\_problems\(\)](#), [fix\\_levels\\_01\\_spss\(\)](#), [has\\_dont\\_know\(\)](#), [intToEnc\(\)](#), [leveltest](#), [remove\\_all\\_dont\\_know\(\)](#)

---

rm.attrs	<i>Removes pattern and variable.labels from attributes list.</i>
----------	--

---

**Description**

Removes pattern and variable.labels from attributes list.

**Usage**

```
rm.attrs(x)
```

**Arguments**

x	Surveydata object
---	-------------------

---

rm.pattern	<i>Removes pattern from attributes list.</i>
------------	--

---

**Description**

Removes pattern from attributes list.

**Usage**

```
rm.pattern(x)
```

**Arguments**

x	Surveydata object
---	-------------------

---

split_common_unique	<i>Get common and unique text in question based on regex pattern identification.</i>
---------------------	--

---

**Description**

Get common and unique text in question based on regex pattern identification.

**Usage**

```
split_common_unique(x, ptn = NULL)
```

**Arguments**

x	A character vector
ptn	A <a href="#">regex()</a> pattern that defines how the string should be split into common and unique elements

**See Also**

Other Question functions: [question\\_text\\_common\(\)](#), [question\\_text\\_unique\(\)](#), [question\\_text\(\)](#), [questions\(\)](#), [which.q\(\)](#)

---

strCommonUnique	<i>Finds the common and unique elements in a character vector.</i>
-----------------	--

---

**Description**

Function takes a character string as input and find the common and unique elements. Assumes that the common element is at start of string.

**Usage**

```
strCommonUnique(string)
```

**Arguments**

string	Character vector
--------	------------------

**Value**

list of common and unique strings

**Examples**

```
test <- c("Q_1", "Q_2", "Q_3")
strCommonUnique(test)$common
strCommonUnique(test)$unique
```

survey\_plot\_question *Plots single and as multi-response questions.*

---

**Description**

Plots single and as multi-response questions.

**Usage**

```
survey_plot_question(data, q)
```

**Arguments**

data	surveydata object
q	Question

**See Also**

Other survey plotting functions: [survey\\_plot\\_satisfaction\(\)](#), [survey\\_plot\\_yes\\_no\(\)](#)

**Examples**

```
question_text(membersurvey)

survey_plot_question(membersurvey, "Q2")
survey_plot_yes_no(membersurvey, "Q2")
survey_plot_satisfaction(membersurvey, "Q14")
```

---

survey\_plot\_satisfaction  
*Plot satisfaction questions.*

---

**Description**

Plot satisfaction questions.

**Usage**

```
survey_plot_satisfaction(data, q, fun = c("net", "top3", "top2"))
```

**Arguments**

data	surveydata object
q	Question
fun	Aggregation function, one of net (compute net satisfaction score), top3 (compute top 3 box score) and top2 (compute top 2 box score)



**See Also**

Other survey plotting functions: [survey\\_plot\\_question\(\)](#), [survey\\_plot\\_yes\\_no\(\)](#)

**Examples**

```
question_text(membersurvey)

survey_plot_question(membersurvey, "Q2")
survey_plot_yes_no(membersurvey, "Q2")
survey_plot_satisfaction(membersurvey, "Q14")
```

---

survey_plot_title	<i>Construct plot title from the question text, wrapping at the desired width.</i>
-------------------	--

---

**Description**

This creates a plot title using `[ggplot2::ggtitle()]`. The main title is string wrapped, and the subtitle is the number of observations in the data.

**Usage**

```
survey_plot_title(data, q, width = 50)
```

**Arguments**

data	surveydata object
q	Question
width	Passed to <a href="#">strwrap()</a>

---

survey_plot_yes_no	<i>Plot data in yes/no format.</i>
--------------------	------------------------------------

---

**Description**

Plot data in yes/no format.

**Usage**

```
survey_plot_yes_no(data, q)
```

**Arguments**

data	surveydata object
q	Question

**See Also**

Other survey plotting functions: [survey\\_plot\\_question\(\)](#), [survey\\_plot\\_satisfaction\(\)](#)

**Examples**

```
question_text(membersurvey)

survey_plot_question(membersurvey, "Q2")
survey_plot_yes_no(membersurvey, "Q2")
survey_plot_satisfaction(membersurvey, "Q14")
```

---

which.q	<i>Identifies the columns indices corresponding to a specific question.</i>
---------	---

---

**Description**

In many survey systems, sub-questions take the form "Q1\_a", "Q1\_b", with the main question and sub-question separated by an underscore. This function conveniently returns column index of matches found for a question id in a [surveydata](#) object. It does this by using the [pattern](#) attribute of the surveydata object.

**Usage**

```
which.q(x, Q, ptn = pattern(x))
```

**Arguments**

x	Object to coerce to surveydata
Q	Character string with question number, e.g. "Q2"
ptn	A list with two elements, sep and exclude. See <a href="#">pattern()</a> and <a href="#">which.q()</a> for more detail.

**See Also**

[questions\(\)](#) to return all questions matching the [pattern\(\)](#)

Other Question functions: [question\\_text\\_common\(\)](#), [question\\_text\\_unique\(\)](#), [question\\_text\(\)](#), [questions\(\)](#), [split\\_common\\_unique\(\)](#)

**Examples**

```
# Basic operations on a surveydata object, illustrated with the example dataset membersurvey

class(membersurvey)

questions(membersurvey)
```

```
which.q(membersurvey, "Q1")
which.q(membersurvey, "Q3")
which.q(membersurvey, c("Q1", "Q3"))

question_text(membersurvey, "Q3")
question_text_unique(membersurvey, "Q3")
question_text_common(membersurvey, "Q3")

# Extracting columns from a surveydata object

head(membersurvey[, "Q1"])
head(membersurvey[,"Q1"])
head(membersurvey[, "Q3"])
head(membersurvey[, c("Q1", "Q3")])

# Note that the result is always a surveydata object, even if only one column is extracted

head(membersurvey[, "id"])
str(membersurvey[, "id"])
```

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