

Package ‘meantables’

March 19, 2022

Type Package

Title Make Quick Descriptive Tables for Continuous Variables

Description Quickly make tables of descriptive statistics (i.e., counts, means, confidence intervals) for continuous variables. This package is designed to work in a Tidyverse pipeline, and consideration has been given to get results from R to 'Microsoft Word' ® with minimal pain.

Version 0.1.2

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Encoding UTF-8

Suggests knitr, rmarkdown, testthat

VignetteBuilder knitr

RoxygenNote 7.1.2

Imports dplyr, tibble, rlang, stringr

NeedsCompilation no

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R topics documented:

mean_format	2
mean_table	3

Index	5
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 mean_format

Format mean_table Output for Publication and Dissemination

Description

The `mean_format` function is intended to make it quick and easy to format the output of the `mean_table` function for tables that may be used for publication. For example, a mean and 95 could be formatted as "24.00 (21.00 - 27.00)."

Usage

```
mean_format(.data, recipe, name = NA, digits = NA)
```

Arguments

<code>.data</code>	A data frame of class "mean_table" or "mean_table_grouped".
<code>recipe</code>	A recipe used to create a new column from existing mean_table columns. The recipe must be in the form of a quoted string. It may contain any combination of column names, spaces, and characters. For example: "mean (sd)" or "mean (lcl - ucl)".
<code>name</code>	An optional name to assign to the column created by the recipe. The default name is "formatted_stats"
<code>digits</code>	The number of decimal places to display.

Value

A tibble

Examples

```
## Not run:
library(dplyr)
library(meantables)

data(mtcars)

# Overall mean table with defaults

mtcars %>%
  mean_table(mpg) %>%
  mean_format("mean (sd)") %>%
  select(response_var, formatted_stats)

# A tibble: 1 × 2
  response_var formatted_stats
  <chr>        <chr>
1 mpg         20.09 (6.03)
```

```
# Grouped means table with defaults

mtcars %>%
  group_by(cyl) %>%
  mean_table(mpg) %>%
  mean_format("mean (sd)") %>%
  select(response_var:group_cat, formatted_stats)

# A tibble: 3 × 4
  response_var group_var group_cat formatted_stats
  <chr>         <chr>         <dbl> <chr>
1 mpg          cyl             4 26.66 (4.51)
2 mpg          cyl             6 19.74 (1.45)
3 mpg          cyl             8 15.1 (2.56)

## End(Not run)
```

mean_table

Estimate Mean and 95 Percent Confidence Intervals in dplyr Pipelines

Description

The `mean_table` function produces overall and grouped tables of means with related statistics. In addition to means, the `mean_table` missing/non-missing frequencies, the standard error of the mean (sem), the 95 value, and the maximum value. For grouped tibbles, `mean_table` displays these statistics for each category of the `group_by` variable.

Usage

```
mean_table(.data, .x, t_prob = 0.975, output = default, digits = 2, ...)
```

Arguments

<code>.data</code>	A tibble or grouped tibble.
<code>.x</code>	The continuous response variable for which the statistics are desired.
<code>t_prob</code>	(1 - alpha / 2). Default value is 0.975, which corresponds to an alpha of 0.05. Used to calculate a critical value from Student's t distribution with n - 1 degrees of freedom.
<code>output</code>	Options for this parameter are "default" and "all". Default output includes the n, mean, sem, and 95 the mean. Using <code>output = "all"</code> also returns the the number of missing values for <code>.x</code> and the critical t-value.
<code>digits</code>	Round mean, lcl, and ucl to digits. Default is 2.
<code>...</code>	Other parameters to be passed on.

Value

A tibble of class "mean_table" or "mean_table_grouped"

References

SAS documentation: <http://support.sas.com/documentation/cdl/en/proc/65145/HTML/default/viewer.htm#p0klmrp4k89pz0>

Examples

```
## Not run:
library(dplyr)
library(meantables)
```

```
data(mtcars)
```

```
# Overall mean table with defaults
```

```
mtcars %>%
  mean_table(mpg)
```

```
# A tibble: 1 x 9
```

response_var	n	mean	sd	sem	lcl	ucl	min	max
<chr>	<int>	<dbl>	<dbl>	<dbl>	<dbl>	<dbl>	<dbl>	<dbl>
1 mpg	32	20.1	6.03	1.07	17.9	22.3	10.4	33.9

```
# Grouped means table with defaults
```

```
mtcars %>%
  group_by(cyl) %>%
  mean_table(mpg)
```

```
# A tibble: 3 x 11
```

response_var	group_var	group_cat	n	mean	sd	sem	lcl	ucl	min	max
<chr>	<chr>	<dbl>	<int>	<dbl>	<dbl>	<dbl>	<dbl>	<dbl>	<dbl>	<dbl>
1 mpg	cyl	4	11	26.7	4.51	1.36	23.6	29.7	21.4	33.9
2 mpg	cyl	6	7	19.7	1.45	0.549	18.4	21.1	17.8	21.4
3 mpg	cyl	8	14	15.1	2.56	0.684	13.6	16.6	10.4	19.2

```
## End(Not run)
```

Index

mean_format, 2
mean_table, 3