

# Package ‘demoGraphic’

January 9, 2019

**Title** Providing Demographic Table with the P-Value, Standardized Mean Difference Value

**Version** 0.1.0

**Description** The Demographic Table in R combines contingency table for categorical variables, mean and standard deviation for continuous variables. t-test, chi-square test and Fisher's exact test calculated the p-value of two groups. The standardized mean difference were performed with 95 % confident interval, and writing table into document file.

**License** GPL-3

**Encoding** UTF-8

**LazyData** true

**Imports** officer, magrittr, MASS, stats

**RoxygenNote** 6.1.1

**Suggests** testthat

**NeedsCompilation** no

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**Repository** CRAN

**Date/Publication** 2019-01-09 17:30:07 UTC

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cat_smd	<i>smd value for categorical variables</i>
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**Description**

smd value for categorical variables

**Usage**

```
cat_smd(htable, var, data)
```

**Arguments**

htable	propotion table of baseline categorical variable and group variable
var	baseline categorical variable
data	data

**Examples**

```
set.seed(2018)
group <-round(abs(rnorm(500)*10),0) %% 2
cont_1 <-round(abs(rnorm(500)*10),0)
cat_multi_1 <-round(abs(rnorm(500)*10),0) %% 3
data_check <-data.frame(group, cont_1, cat_multi_1)
data_check$group <- factor(data_check$group, levels = c(0,1), labels = c("Control", "Treatment"))
data_check$cat_multi_1 <- factor(data_check$cat_multi_1)
cat_smd(table(data_check$cat_multi_1, data_check$group),"cat_multi_1",data_check )
```

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cat_table	<i>DemoGraphic table for categorical variables</i>
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**Description**

DemoGraphic table for categorical variables

**Usage**

```
cat_table(var, strata, data)
```

**Arguments**

var	baseline variables
strata	group variable with 1 = treatment and 0 = control
data	data

**Examples**

```
set.seed(2018)
group <-round(abs(rnorm(500)*10),0) %% 2
cont_1 <-round(abs(rnorm(500)*10),0)
cat_multi_1 <-round(abs(rnorm(500)*10),0) %% 3
data_check <-data.frame(group, cont_1, cat_multi_1)
data_check$group <- factor(data_check$group, levels = c(0,1), labels = c("Control", "Treatment"))
data_check$cat_multi_1 <- factor(data_check$cat_multi_1)
cat_table("cat_multi_1", "group", data_check )
```

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cont_smd	<i>smd value for continuous variable.</i>
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**Description**

smd value for continuous variable.

**Usage**

```
cont_smd(mean1, mean2, var1, var2)
```

**Arguments**

mean1	mean of a baseline variable in the treatment group.
mean2	mean of a baseline variable in the control group.
var1	variance a baseline variable in the treatment group.
var2	variance of a baseline variable in the control group.

**Value**

smd value

**Examples**

```
cont_smd(10, 11, 2, 3)
```

---

cont_table	<i>DemoGraphic table for continuous variables</i>
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**Description**

DemoGraphic table for continuous variables

**Usage**

```
cont_table(var, strata, data)
```

**Arguments**

var	variables
strata	group variable with 1 = treatment and 0 = control
data	data

**Value**

mean, standard deviation of treatment and control group, smd, and p value.

**Examples**

```
set.seed(2018)
group <-round(abs(rnorm(500)*10),0) %% 2
cont_1 <-round(abs(rnorm(500)*10),0)
cat_multi_1 <-round(abs(rnorm(500)*10),0) %% 3
data_check <-data.frame(group, cont_1, cat_multi_1)
data_check$group <- factor(data_check$group, levels = c(0,1), labels = c("Control","Treatment"))
data_check$cat_multi_1 <- factor(data_check$cat_multi_1)
cont_table("cont_1","group", data_check )
```

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demo_table	<i>Demographic Table for continuous and categorical variables</i>
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**Description**

Demographic Table for continuous and categorical variables

**Usage**

```
demo_table(var, strata, data)
```

**Arguments**

var	list of baseline variables
strata	group variable with 1 = treatment and 0 = control
data	data

**Examples**

```
set.seed(2018)
group <-round(abs(rnorm(500)*10),0) %% 2
cont_1 <-round(abs(rnorm(500)*10),0)
cat_multi_1 <-round(abs(rnorm(500)*10),0) %% 3
data_check <-data.frame(group, cont_1, cat_multi_1)
data_check$group <- factor(data_check$group, levels = c(0,1), labels = c("Control", "Treatment"))
data_check$cat_multi_1 <- factor(data_check$cat_multi_1)
demo_table(c("cont_1","cat_multi_1"),"group", data_check )
```

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get\_mean

*Mean, var function*

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**Description**

Mean, var function

**Usage**

```
get_mean(x)
```

**Arguments**

x	variable
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**Value**

mean table

**Examples**

```
get_mean(round(abs(rnorm(500)*10),0))
```

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my.chi.sq	<i>chi square test to get expected value and p value</i>
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**Description**

chi square test to get expected value and p value

**Usage**

```
my.chi.sq(...)
```

**Arguments**

```
...          variables
```

**Examples**

```
set.seed(2018)
group <-round(abs(rnorm(500)*10),0) %% 2
cont_1 <-round(abs(rnorm(500)*10),0)
cat_multi_1 <-round(abs(rnorm(500)*10),0) %% 3
data_check <-data.frame(group, cont_1, cat_multi_1)
data_check$group <- factor(data_check$group, levels = c(0,1), labels = c("Control","Treatment"))
data_check$cat_multi_1 <- factor(data_check$cat_multi_1)
my.chi.sq(table(data_check$cat_multi_1, data_check$group))
```

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my.fisher	<i>fisher exact test to get p value if any cell in propotion table of expect value less than 5</i>
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**Description**

fisher exact test to get p value if any cell in propotion table of expect value less than 5

**Usage**

```
my.fisher(...)
```

**Arguments**

```
...          variables
```

**Examples**

```
set.seed(2018)
data_check <-data.frame(
  group <-round(abs(rnorm(500)*10),0) %% 2,
  cat_multi_1 <-round(abs(rnorm(500)*10),0) %% 3)
my.fisher(table(data_check$cat_multi_1, data_check$group))
```

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mydocx	<i>write smd table or demographic table into docx file</i>
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**Description**

write smd table or demographic table into docx file

**Usage**

```
mydocx(smd_table, name)
```

**Arguments**

smd_table	smd table or demo graphic table.
name	file name to save

**Examples**

```
mydocx(data.frame(smd.value <- 3.4, smd.lo <- 1.1, smd.up <- 5.6), "smd_table")
```

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smd_ci	<i>Confident interval for smd</i>
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**Description**

Confident interval for smd

**Usage**

```
smd_ci(n1, n2, smd)
```

**Arguments**

n1	length of a baseline variable in the treatment group.
n2	length of a baseline variable in the control group.
smd	smd value

**Value**

vector of 95

**Examples**

```
smd_ci(10, 12, 0.3)
```

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t.test.p.value	<i>t.test to calculate p value</i>
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**Description**

t.test to calculate p value

**Usage**

```
## S3 method for class 'test.p.value'  
t(...)
```

**Arguments**

... variables

**Value**

p value



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