Package 'apaText'

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Type Package

Title Create R Markdown Text for Results in the Style of the American Psychological Association (APA)

Version 0.1.7

Description Create APA style text from analyses for use within R Markdown documents. Descriptive statistics, confidence intervals, and cell sizes are reported.

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Encoding UTF-8

Depends R (>= 3.1.2)

Imports stats, dplyr, cocor

Suggests apaTables

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Author David Stanley [aut, cre]

Maintainer David Stanley <dstanley@uoguelph.ca>

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R topics documented:

apa.desc *Report descriptive statistics for a set of values*

Description

Report descriptive statistics for a set of values

Usage

```
apa.desc(
  .data,
  .dv = NULL,
  show.mean = NULL,
  show.sd = NULL,
  show.se = NULL,
  show.conf.interval = NULL,
  show.N = NULL,
  number.decimals = NULL
)
```

Arguments

.data	A data frame or data frame extension (e.g., tibble)
.dv	Name of the dependent variable column
show.mean	Show mean (Bool. Default TRUE)
show.sd	Show standard deviation (Bool. Default TRUE)
show.se	Show standard error (Bool. Default FALSE)
show.conf.interval	Show confidence interval (Bool. Default TRUE)
show.N	Show number of cases (Bool. Default TRUE)
number.decimals	Number of decimals in output

Value

R Markdown text

Examples

```
# 2-way ANOVA Example
if  (requireNamespace("apaTables", quietly = TRUE)){
    library(dplyr)
    goggles <- apaTables::goggles

    #Main Effect Means: Gender
    goggles %>% filter(gender == "Female") %>% apa.desc(attractiveness)
```

```
    goggles %>% filter(gender == "Male") %>% apa.desc(attractiveness)

    # Main Effect Means: Alcohol
    goggles %>% filter(alcohol == "None") %>% apa.desc(attractiveness)
    goggles %>% filter(alcohol == "2 Pints") %>% apa.desc(attractiveness)
    goggles %>% filter(alcohol == "4 Pints") %>% apa.desc(attractiveness)

    # Single Cell Mean
    goggles %>% filter(alcohol == "4 Pints", gender == "Female") %>%
                apa.desc(attractiveness)
}
```

`apa.ind.t.test` *Report descriptive statistics for a set of values*

Description

Report descriptive statistics for a set of values

Usage

```
apa.ind.t.test(
  .data,
  .iv,
  .dv,
  bonferroni.multiplier = 1,
  show.mean.difference = TRUE,
  show.statistic = NULL,
  show.conf.interval = NULL,
  number.decimals = NULL,
  number.decimals.p = NULL,
  var.equal = TRUE,
  one.sided = FALSE
)
```

Arguments

`.data`	A data frame or data frame extension (e.g., tibble)
`.iv`	Name of the independent variable column (only 2 levels)
`.dv`	Name of the dependent variable column
`bonferroni.multiplier`	Multiply the p-value by this number to make a bonferroni adjustment
`show.mean.difference`	Show mean difference (Bool. Default TRUE)
`show.statistic`	Show t-value (Bool. Default TRUE)
`show.conf.interval`	Show CI for mean difference (Bool. Default TRUE)

`number.decimals`
: Number of decimals used in output (excluding p-value)

`number.decimals.p`
: Number of decimals used in p-value output

`var.equal`
: (boolean) TRUE or FALSE for cell equal variances

`one.sided`
: (boolean) TRUE or FALSE for conducting a one-sided test

Value

R Markdown text

Examples

```
if  (requireNamespace("apaTables", quietly = TRUE)){
    library(dplyr)
    goggles <- apaTables::goggles

    # one-sided test
    goggles %>%
      filter(alcohol == "None") %>%
      filter(gender == "Female" | gender == "Male") %>%
      apa.ind.t.test(gender, attractiveness,
                     var.equal = TRUE, one.sided = TRUE)
    #two-sided test
    goggles %>%
      filter(alcohol == "None") %>%
      filter(gender == "Female" | gender == "Male") %>%
      apa.ind.t.test(gender, attractiveness,
                      var.equal = TRUE, one.sided = FALSE)

    #two-sided test with Bonferroni correction (three exploratory tests)
    goggles %>%
      filter(alcohol == "None") %>%
      filter(gender == "Female" | gender == "Male") %>%
      apa.ind.t.test(gender, attractiveness,
                     var.equal = TRUE, one.sided = FALSE,
                      bonferroni.multiplier = 3)
 }
```

`apa.r` *Report r(x,y) correlation in markdown APA style*

Description

Report r(x,y) correlation in markdown APA style

Usage

```
apa.r(
  .data,
  .x,
  .y,
  alternative = "two.sided",
  method = "pearson",
  show.r = TRUE,
  show.conf.interval = NULL,
  show.N = NULL,
  show.p = NULL,
  show.statistic = NULL,
  number.decimals = NULL,
  number.decimals.p = NULL
)
```

Arguments

.data	A data frame or data frame extension (e.g., tibble)
.x	Name of column in data frame
.y	Name of column in data frame
alternative	Alternative hypothesis to pass to alternative argument of cor.test. Default is "two.sided"
method	Calculation method to pass to alternative argument of cor.test. Default is "pearson"
show.r	Show correlation or not (TRUE/FALSE)
show.conf.interval	Show confidence interval or not (TRUE/FALSE). Default behavior is TRUE.
show.N	Show sample size or not (TRUE/FALSE). Default behavior is TRUE.
show.p	Show p-value or not (TRUE/FALSE). Default behavior is TRUE.
show.statistic	Show test statistic or not (TRUE/FALSE). Default behavior is TRUE.
number.decimals	Number of decimals used in output (excluding p-value)
number.decimals.p	Number of decimals used in output for p-value

Value

R Markdown text

Examples

```
library(dplyr)
attitude %>% apa.r(rating, advance)
```

`apa.r.compare.across.samples` *Report difference between correlations in markdown APA style from different samples*

Description

Report difference between correlations in markdown APA style from different samples

Usage

```
apa.r.compare.across.samples(
  formula,
  data1,
  data2,
  alternative = "two.sided",
  show.conf.interval = NULL,
  show.N = NULL,
  show.p = NULL,
  show.statistic = NULL
)
```

Arguments

`formula`	Formula for comparing correlations
`data1`	Project data frame 1 name
`data2`	Project data frame 2 name
`alternative`	Alternative hypothesis to pass to alternative argument of cocor.indep.groups. Default is "two.sided"
`show.conf.interval`	Show confidence interval or not (TRUE/FALSE). Default behavior is TRUE.
`show.N`	Show sample size or not (TRUE/FALSE). Default behavior is TRUE.
`show.p`	Show p-value or not (TRUE/FALSE). Default behavior is TRUE.
`show.statistic`	Show test statistic or not (TRUE/FALSE). Default behavior is TRUE.

Value

R Markdown text

Examples

```
# Test difference between r(rating, learning) from dataset: attitude
# and r(weight, height) from dataset: women

apa.r.compare.across.samples(formula = ~ rating + learning | height + weight,
```

```
                              data1 = attitude,
                              data2 = women)
```

`apa.r.compare.across.samples.from.descriptive` *Report difference between correlations in markdown APA style from different samples*

Description

Report difference between correlations in markdown APA style from different samples

Usage

```
apa.r.compare.across.samples.from.descriptive(
  r1,
  r2,
  n1,
  n2,
  alternative = "two.sided",
  show.conf.interval = NULL,
  show.N = NULL,
  show.p = NULL,
  show.statistic = NULL
)
```

Arguments

`r1`	Correlation in sample 1
`r2`	Correlation in sample 2
`n1`	Sample size for sample 1
`n2`	Sample size for sample 2
`alternative`	Alternative hypothesis to pass to alternative argument of cocor.indep.groups. Default is "two.sided"
`show.conf.interval`	Show confidence interval or not (TRUE/FALSE). Default behavior is TRUE.
`show.N`	Show sample size or not (TRUE/FALSE). Default behavior is TRUE.
`show.p`	Show p-value or not (TRUE/FALSE). Default behavior is TRUE.
`show.statistic`	Show test statistic or not (TRUE/FALSE). Default behavior is TRUE.

Value

R Markdown text

Examples

```
apa.r.compare.across.samples.from.descriptive(r1 = .3, r2 =.6, n1 = 70, n2 =80)
```

`apa.r.compare.within.sample` *Report difference in markdown APA style between between correlations within a sample*

Description

Report difference in markdown APA style between between correlations within a sample

Usage

```
apa.r.compare.within.sample(
  formula,
  data,
  test = "pearson1898",
  alternative = "two.sided",
  show.conf.interval = NULL,
  show.N = NULL,
  show.p = NULL,
  show.statistic = NULL
)
```

Arguments

`formula`	Formula for comparing correlations
`data`	Project data frame name
`test`	Type of significance test. If non-overlapping variables use one of "pearson1898", "dunn1969", "steiger1980", "raghunathan1996", or "silver2004". If overlapping variables use one of pearson1898, hotelling1940, hendrickson1970, williams1959, olkin1967, dunn1969, steiger1980, meng1992, hittner2003. Default is pearson1898.
`alternative`	Alternative hypothesis to pass to alternative argument of cor.test. Default is "two.sided"
`show.conf.interval`	Show confidence interval or not (TRUE/FALSE). Default behavior is TRUE.
`show.N`	Show sample size or not (TRUE/FALSE). Default behavior is TRUE.
`show.p`	Show p-value or not (TRUE/FALSE). Default behavior is TRUE.
`show.statistic`	Show test statistic or not (TRUE/FALSE). Default behavior is TRUE.

Value

R Markdown text

Examples

```
# non-overlappling variables example
apa.r.compare.within.sample(data = attitude,
  formula = ~ rating + complaints | privileges + learning)

# overlappling variables example
apa.r.compare.within.sample(data = attitude,
  formula = ~ rating + complaints | rating + learning)
```

`apaText` *Create R Markdown Text for Results in the Style of the American Psychological Association (APA)*

Description

Create APA style text from analyses for use within R Markdown documents. Descriptive statistics, confidence intervals, and cell sizes are reported.

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Author(s)

Author:	David J. Stanley <dstanley@uoguelph.ca>
Maintainer:	David J. Stanley <dstanley@uoguelph.ca>

`set.apa.default.options`

Create apaText default options for showing confidence intervals etc.. These options will be used unless overridden by local function arguments

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Description

Create apaText default options for showing confidence intervals etc.. These options will be used unless overridden by local function arguments

Usage

```
set.apa.default.options()
```

Value

A list with options object for apaText

Examples

```
# You must create an object called apa.default.options
# for options to be used, as per below.

apa.options <- set.apa.default.options()
```

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