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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**Description**

Report descriptive statistics for a set of values

**Usage**

```r
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**

```r
# 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

```r
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
### apa.r

#### Usage

```r
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

```r
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)

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 correlations within a sample

Description

Report difference in markdown APA style 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
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-overlapping variables example
apa.r.compare.within.sample(data = attitude,
 formula = ~ rating + complaints | privileges + learning)

# overlapping 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.

Package: apaText
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Author(s)

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set.apa.default.options

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

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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