

Package ‘tidysmd’

October 25, 2021

Title Tidy Standardized Mean Differences

Version 0.1.0

Description Tidy standardized mean differences ('SMDs'). 'tidysmd' uses the 'smd' package to calculate standardized mean differences for variables in a data frame, returning the results in a tidy format.

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URL <https://github.com/malcolmbarrett/tidysmd>,
<https://malcolmbarrett.github.io/tidysmd/>

BugReports <https://github.com/malcolmbarrett/tidysmd/issues>

Depends R (>= 2.10)

Imports dplyr, ellipsis, glue, purrr, rlang, smd, stats, tidyr,
tidyselect

Suggests spelling, covr, testthat (>= 3.0.0)

Config/testthat/edition 3

Encoding UTF-8

LazyData true

RoxygenNote 7.1.2

Language en-US

NeedsCompilation no

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Repository CRAN

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nhefs_weights	<i>NHEFS with various propensity score weights</i>
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Description

A dataset containing various propensity score weights for `causaldata::nhefs_complete`.

Usage

```
nhefs_weights
```

Format

A data frame with 1566 rows and 14 variables:

qsmk Quit smoking
race Race
age Age
education Education level
smokeintensity Smoking intensity
smokeyrs Number of smoke-years
exercise Exercise level
active Daily activity level
wt71 Participant weight in 1971 (baseline)
w_ate ATE weight
w_att ATT weight
w_atc ATC weight
w_atm ATM weight
w_ato ATO weight

tidy_smd	<i>Tidy Standardized Mean Differences</i>
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Description

`tidy_smd()` calculates the standardized mean difference (SMD) for variables in a dataset between groups. Optionally, you may also calculate weighted SMDs. `tidy_smd()` wraps `smd::smd()`, returning a tidy dataframe with the columns `variable`, `weights`, and `smd`, as well as fourth column the contains the level of `.group` the SMD represents. You may also supply multiple weights to calculate multiple weighted SMDs, useful when comparing different types of weights.

Usage

```
tidy_smd(  
  .df,  
  .vars,  
  .group,  
  .wts = NULL,  
  include_unweighted = TRUE,  
  na.rm = FALSE,  
  gref = 1L,  
  std.error = FALSE  
)
```

Arguments

<code>.df</code>	A data frame
<code>.vars</code>	Variables for which to calculate SMD
<code>.group</code>	Grouping variable
<code>.wts</code>	Variables to use for weighting the SMD calculation
<code>include_unweighted</code>	Logical. If using <code>.wts</code> , also calculate the unweighted SMD?
<code>na.rm</code>	Remove NA values from <code>x</code> ? Defaults to FALSE.
<code>gref</code>	an integer indicating which level of <code>g</code> to use as the reference group. Defaults to 1.
<code>std.error</code>	Logical indicator for computing standard errors using <code>compute_smd_var</code> . Defaults to FALSE.

Value

a tibble

Examples

```
tidy_smd(nhefs_weights, c(age, education, race), .group = qsmk)  
tidy_smd(nhefs_weights, c(age, education), .group = qsmk, std.error = TRUE)  
  
tidy_smd(  
  nhefs_weights,  
  c(age, race, education),  
  .group = qsmk,  
  .wts = c(w_ate, w_att, w_atm)  
)
```

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