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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BugReports https://github.com/malcolmbarrett/tidysmd/issues
Depends R (>= 2.10)
Imports dplyr, ellipsis, glue, purrr, rlang, smd, stats, 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
Date/Publication 2021-10-25 07:00:02 UTC

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**nhefs_weights**  *NHEFS with various propensity score weights*

### Description

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

### Usage

```r
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

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**tidy_smd**  *Tidy Standardized Mean Differences*

### 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**

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

**Arguments**

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

**Value**

a tibble

**Examples**

```r
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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