

Package ‘FertNet’

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Type Package

Title Process Data from the Social Networks and Fertility Survey

Version 0.1.2

Description Processes data from The Social Networks and Fertility Survey, downloaded from <https://dataarchive.lisssdata.nl>, including correcting respondent errors and transforming network data into network objects to facilitate analyses and visualisation.

Encoding UTF-8

RoxygenNote 7.2.3

Imports haven (>= 2.5.1)

Suggests testthat (>= 3.0.0), tidygraph (>= 1.2.2)

Config/testthat/edition 3

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URL <https://github.com/gertstulp/FertNet>

BugReports <https://github.com/gertstulp/FertNet/issues>

NeedsCompilation no

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|---------------------|---|
| change_column_types | <i>Change column types for social networks and fertility data (LISS: wj18a_EN_1.0p.sav)</i> |
|---------------------|---|

Description

Change column types for social networks and fertility data (LISS: wj18a_EN_1.0p.sav)

Usage

```
change_column_types(data)
```

Arguments

data Tibble which is the result of translate(read_data())

Value

Tibble with corrected column types and updated labels

Examples

```
read_data() |> translate() |> change_column_types()
```

| | |
|-------------------|---|
| create_alter_attr | <i>Create dataframe of alter attributes based on social networks and fertility data (LISS: wj18a_EN_1.0p.sav)</i> |
|-------------------|---|

Description

Create dataframe of alter attributes based on social networks and fertility data (LISS: wj18a_EN_1.0p.sav)

Usage

```
create_alter_attr(data)
```

Arguments

data Tibble which is the result of create_relation_labels(fix_errors(change_column_types(translate(read_data()) |> translate())))

Value

Tibble with variable `alter_attr` which includes a dataframe with alter attributes for each respondent

Examples

```
data <- read_data() |> translate() |>
  change_column_types() |> fix_errors() |> create_relation_labels()
create_alter_attr(data[1, ])
```

| | |
|------------------------------|---|
| <code>create_edgelist</code> | <i>Create dataframe of edgelist based on social networks and fertility data (LISS: wj18a_EN_1.0p.sav)</i> |
|------------------------------|---|

Description

Create dataframe of edgelist based on social networks and fertility data (LISS: wj18a_EN_1.0p.sav)

Usage

```
create_edgelist(data = NULL, vars = NULL)
```

Arguments

| | |
|-------------------|--|
| <code>data</code> | Tibble which is the result of <code>create_relation_labels(fix_errors(change_column_types(translate(read_data()))))</code> |
| <code>vars</code> | Vector with variable names of 25 variables describing alter-alter-ties |

Value

Tibble with variable `edgelist` which includes a dataframe with edgelist for each respondent

Examples

```
data <- read_data() |> translate() |> change_column_types() |>
  fix_errors() |> create_relation_labels()
create_edgelist(data[1, vars_alter_ties])
```

| | |
|-----------|--|
| create_nw | <i>Create dataframes of alter attributes and edgelists and store them in list-columns for social networks and fertility data (LISS: wj18a_EN_1.0p.sav)</i> |
|-----------|--|

Description

Create dataframes of alter attributes and edgelists and store them in list-columns for social networks and fertility data (LISS: wj18a_EN_1.0p.sav)

Usage

```
create_nw(data)
```

Arguments

| | |
|------|---|
| data | Tibble which is the result of create_relation_labels(fix_errors(change_column_types(translate |
|------|---|

Value

Tibble with list-columns containing alter attributes and edgelists

Examples

```
read_data() |> translate() |> change_column_types() |>
fix_errors() |> create_relation_labels() |> create_nw()
```

| | |
|------------------------|--|
| create_relation_labels | <i>Produces corrected relationship labels for social networks and fertility data (LISS: wj18a_EN_1.0p.sav)</i> |
|------------------------|--|

Description

Produces corrected relationship labels for social networks and fertility data (LISS: wj18a_EN_1.0p.sav)

Usage

```
create_relation_labels(data)
```

Arguments

| | |
|------|---|
| data | Tibble which is the result of fix_errors(change_column_types(translate(read_data()))) |
|------|---|

Value

Tibble in which data on relationship labels are corrected and improved

Examples

```
read_data() |> translate() |> change_column_types() |>  
fix_errors() |> create_relation_labels()
```

| | |
|------------------|---|
| create_tidygraph | <i>Create tidygraph objects from social networks and fertility data (LISS: wj18a_EN_1.0p.sav)</i> |
|------------------|---|

Description

Create tidygraph objects from social networks and fertility data (LISS: wj18a_EN_1.0p.sav)

Usage

```
create_tidygraph(data)
```

Arguments

data Tibble which is the result of produce_data()

Value

Tibble with variable tidygraph that includes tidygraph objects for all respondents

Examples

```
produce_data() |> create_tidygraph()
```

| | |
|------------|---|
| fix_errors | <i>Fixes reporting errors and inconsistencies in social networks and fertility data (LISS: wj18a_EN_1.0p.sav)</i> |
|------------|---|

Description

Fixes reporting errors and inconsistencies in social networks and fertility data (LISS: wj18a_EN_1.0p.sav)

Usage

```
fix_errors(data)
```

Arguments

data Tibble which is the result of `change_column_types(translate(read_data()))`

Value

Tibble in which data errors are fixed and data worries are flagged

Examples

```
read_data() |> translate() |> change_column_types() |> fix_errors()
```

`get_background_vars` *Get respondent background variables (LISS: avars_201802_EN_1.0p.sav) for social networks and fertility data (LISS: wj18a_EN_1.0p.sav)*

Description

Get respondent background variables (LISS: avars_201802_EN_1.0p.sav) for social networks and fertility data (LISS: wj18a_EN_1.0p.sav)

Usage

```
get_background_vars(file = "avars_201802_EN_1.0p.sav")
```

Arguments

file Path to file avars_201802_EN_1.0p.sav (or renamed variant)

Value

Tibble of data with background variables for social networks and fertility data

Examples

```
get_background_vars()
```

| | |
|--------------|---|
| produce_data | <i>Produces tidy dataset of social networks and fertility data (LISS: wj18a_EN_1.0p.sav) with network data as listcolumns</i> |
|--------------|---|

Description

Produces tidy dataset of social networks and fertility data (LISS: wj18a_EN_1.0p.sav) with network data as listcolumns

Usage

```
produce_data(  
  tidygraph_col = FALSE,  
  background_vars = FALSE,  
  remove_timing_vars = TRUE  
)
```

Arguments

`tidygraph_col` Should a variable `tidygraph` be created that includes tidygraph object for each respondent? (default: FALSE)

`background_vars` Should respondent background variables be added? Requires presence of `avars_201802_EN_1.0p.sav` (default: FALSE)

`remove_timing_vars` Should variables on timing of survey responses be removed? (default: TRUE)

Value

Tibble of social networks and fertility data (LISS: wj18a_EN_1.0p.sav) with network data as listcolumns

Examples

```
produce_data()  
produce_data(TRUE, TRUE, FALSE)
```

| | |
|-----------|--|
| read_data | <i>Reads-in social networks and fertility data (LISS: wj18a_EN_1.0p.sav)</i> |
|-----------|--|

Description

Reads-in social networks and fertility data (LISS: wj18a_EN_1.0p.sav)

Usage

```
read_data(file = "wj18a_EN_1.0p.sav")
```

Arguments

file Path to file wj18a_EN_1.0p.sav (or renamed variant)

Value

Tibble of social networks and fertility data

Examples

```
read_data("wj18a_EN_1.0p.sav")
```

| | |
|--------------------|---|
| remove_timing_vars | <i>Remove variables related to timing of giving answers in survey</i> |
|--------------------|---|

Description

Remove variables related to timing of giving answers in survey

Usage

```
remove_timing_vars(data)
```

Arguments

data Tibble sent within function produce_data()

Value

Tibble without timing variables

| | |
|-----------|--|
| translate | <i>Translate LISS variable names of social networks and fertility data (LISS: wj18a_EN_1.0p.sav) into sensible English names</i> |
|-----------|--|

Description

Translate LISS variable names of social networks and fertility data (LISS: wj18a_EN_1.0p.sav) into sensible English names

Usage

```
translate(data)
```

Arguments

data Tibble which is the result of read_data()

Value

Tibble with sensible column names

Examples

```
read_data() |> translate()
```

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