

# 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.li/ssdata.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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**Repository** CRAN

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

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

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

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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>
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**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
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**Value**

Tibble with list-columns containing alter attributes and edgelists

**Examples**

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

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create_relation_labels	
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*Produces corrected relationship labels for social networks and fertility data (LISS: wj18a\_EN\_1.0p.sav)*

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**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())))
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**Value**

Tibble in which data on relationship labels are corrected and improved

**Examples**

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

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

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

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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)*

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**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()
```

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

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

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



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