

Package ‘dropout’

September 28, 2023

Title Handling Incomplete Responses in Survey Data Analysis

Version 2.1.0

Description Offers robust tools to identify and manage incomplete responses in survey datasets, thereby enhancing the quality and reliability of research findings.

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Encoding UTF-8

RoxygenNote 7.2.3

URL <https://github.com/hendr1km/dropout>,
<https://hendr1km.github.io/dropout/>

BugReports <https://github.com/hendr1km/dropout/issues>

Suggests knitr, rmarkdown, testthat (>= 3.0.0), ggplot2

Imports dplyr, tibble, Rcpp (>= 1.0.0)

LinkingTo Rcpp

Config/testthat/edition 3

Depends R (>= 2.10),

LazyData true

VignetteBuilder knitr

NeedsCompilation yes

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`drop_detect`*Detecting Dropouts in Surveys*

Description

`drop_detect` function detects participants who have dropped out of a survey. It identifies sequences of NA values up to the last survey question and pinpoints the column where the dropout occurred. It also provides the index of that column, enabling targeted analysis of dropout patterns.

Usage

```
drop_detect(data, last_col = NULL)
```

Arguments

| | |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <code>data</code> | A dataframe or tibble containing the survey data. |
| <code>last_col</code> | The index position or column name of the last survey item. This is optional and is used when there are additional columns in the data frame that are not part of the survey questions you are interested in. |

Value

A dataframe or tibble where each row corresponds to a row in the original dataset. It contains three columns:

- `dropout`: A logical indicating whether a dropout was detected for this row.
- `dropout_column`: If `dropout` is TRUE, the name of the column where the dropout occurred.
- `dropout_index`: If `dropout` is TRUE, the index (column number) where the dropout occurred.

See Also

See vignette for detailed workflows and practical examples.

Examples

```
# Basic usage  
drop_detect(flying, "location_census_region")
```

| | |
|--------------|----------------------------------------|
| drop_summary | <i>Summarizing Dropouts in Surveys</i> |
|--------------|----------------------------------------|

Description

drop_summary function provides a high-level summary of dropout occurrences in the survey data. It generates key statistics to understand the patterns of participant dropouts across different survey questions.

Usage

```
drop_summary(data, last_col = NULL, section_min = 3)
```

Arguments

| | |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| data | A dataframe or tibble containing the survey data. |
| last_col | The index position or column name of the last survey item. This is optional and is used when there are additional columns in the data frame that are not part of the survey questions you are interested in. |
| section_min | Indicates occurrences of missing values that span at least n consecutive columns (n defaults to 3) |

Value

A dataframe or tibble containing summary statistics about dropouts. Typical columns might include:

- question_name: The name of the survey question or column.
- dropout_count: The number of dropouts at this question.
- dropout_percentage: The percentage of participants who dropped out at this question.

See Also

See vignette for detailed workflows, tips on interpretation, and practical examples.

Examples

```
# Basic usage
drop_summary(flying, "location_census_region")

# Summarizing dropouts up to a specific column
drop_summary(flying, last_col = "age")

# Read more in the vignette for interpreting summary statistics and plotting dropout trends.
```

 flying

Flying Etiquette Survey Data

Description

This is a modified version of the Flying Etiquette Survey data behind the story: 41 percent of flyers say it's rude to recline your seat on an airplane.

Usage

flying

Format

a dataframe 1040 obs. and 28 columns, which are:

respondent_id respondentid

travel_frequency how often do you travel by plane?

seat_recline do you ever recline your seat when you fly?

height how tall are you?

children_under_18 do you have any children under 18?

two_armrests in a row of three seats, who should get to use the two arm rests?

middle_armrest in a row of two seats, who should get to use the middle arm rest?

window_shade who should have control over the window shade?

moving_to_unsold_seat is it rude to move to an unsold seat on a plane?

talking_to_seatmate generally speaking, is it rude to say more than a few words to the stranger sitting next to you on a plane?

getting_up_on_6_hour_flight on a 6 hour flight from nyc to la, how many times is it acceptable to get up if you're not in an aisle seat?

obligation_to_reclined_seat is it rude to recline your seat on a plane?

eliminate_reclining_seats given the opportunity, would you eliminate the possibility of reclining seats on planes entirely?

switch_for_friends is it rude to ask someone to switch seats with you in order to be closer to friends?

switch_for_family is it rude to ask someone to switch seats with you in order to be closer to family?

wake_passenger_bathroom is it rude to wake a passenger up if you are trying to go to the bathroom?

wake_passenger_walk is it rude to wake a passenger up if you are trying to walk around?

baby_on_plane in general, is it rude to bring a baby on a plane?

unruly_children in general, is it rude to knowingly bring unruly children on a plane?

electronics_violation have you ever used personal electronics during take off or landing in violation of a flight attendant's direction?

smoking_violation have you ever smoked a cigarette in an airplane bathroom when it was against the rules?

gender gender

age age

household_income household income

education education

location_census_region location (census region)

survey_type type of the survey

Source

<https://github.com/fivethirtyeight/data/tree/15f210532b2a642e85738ddefa7a2945d47e2585/flying-etiquette-survey>

<https://fivethirtyeight.com/features/airplane-etiquette-recline-seat/>

Examples

```
data(flying)
```

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