

# Package ‘dropout’

March 6, 2024

**Title** Handling Incomplete Responses in Survey Data Analysis

**Version** 2.1.1

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

**License** MIT + file LICENSE

**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 (>= 3.5),

**LazyData** true

**VignetteBuilder** knitr

**NeedsCompilation** yes

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**Repository** CRAN

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## R topics documented:

drop_detect . . . . .	2
drop_summary . . . . .	3
flying . . . . .	4
<b>Index</b>	<b>6</b>

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`drop_detect`*Detecting Dropouts in Surveys*

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## 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")
```

## 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:

- `column_name`: Lists the names of the columns from your dataset that have been analyzed for dropouts.
- `dropout`: Contains the frequency of dropouts within each listed column, allowing you to see where dropout rates might be the most significant.
- `drop_rate`: Shows the percentage of dropout incidents in each column. This is useful for understanding the relative impact of dropouts in various parts of your dataset.
- `cum_drop_rate`: Shows the overall percentage of dropout incidents in each column.
- `drop_na`: Provides the percentage of missing values in each column that can be attributed specifically to dropouts. This offers insights into the nature of missing data.
- `section_na`: Indicates occurrences of missing values that span at least n consecutive columns (n defaults to 3). You can adjust this parameter using `section_min`

## 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.
```

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 flying

*Flying Etiquette Survey Data*


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**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)
```

# Index

\* **datasets**

    flying, 4

drop\_detect, 2

drop\_summary, 3

flying, 4