

Package ‘childfree’

September 4, 2024

Title Access and Harmonize Childfree Demographic Data

Version 0.0.3

Description Reads demographic data from a variety of public data sources, extracting and harmonizing variables useful for the study of childfree individuals. The identification of childfree individuals and those with other family statuses uses Neal & Neal's (2024) ``A Framework for Studying Adults who Neither have Nor Want Children" <doi:10.1177/10664807231198869>; A preprint is available at <doi:10.31234/osf.io/fa89m>.

License GPL-3

Encoding UTF-8

RoxygenNote 7.3.1

Depends R (>= 2.10)

Imports rio, utils, survey, RCurl

Suggests knitr,

VignetteBuilder knitr

URL <https://www.zacharyneal.com/childfree>,
<https://www.jennawneal.com/childfree-adults>,
<https://github.com/zpneal/childfree>

BugReports <https://github.com/zpneal/childfree/issues>

NeedsCompilation no

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Repository CRAN

Date/Publication 2024-09-04 15:40:02 UTC

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`childfree`*childfree: Access and harmonize childfree demographic data*

Description

Reads demographic data from a variety of public data sources, extracting and harmonizing variables useful for the study of childfree individuals. The identification of childfree individuals and those with other family statuses uses the framework described by Neal & Neal (2024).

Data can be generated from:

- Demographic and Health Surveys data using `dhs()`
- Michigan State University State of the State data using `sooss()`
- US CDC National Survey of Family Growth data using `nsfg()`

An introduction to the package is available using `vignette("childfree")`, and the detailed codebooks generated by these functions are available using `vignette("codebooks")`.

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References

Neal, Z. P. and Neal, J. W. (2024). A framework for studying adults who neither have nor want children. *The Family Journal*, 32, 121-130. Version of record: [doi:10.1177/10664807231198869](https://doi.org/10.1177/10664807231198869)
Preprint: [doi:10.31234/osf.io/fa89m](https://doi.org/10.31234/osf.io/fa89m)

See Also

Useful links:

- <https://www.zacharyneal.com/childfree>
- <https://www.jennawneal.com/childfree-adults>
- <https://github.com/zpneal/childfree>
- Report bugs at <https://github.com/zpneal/childfree/issues>

dhs	<i>Read and recode Demographic and Health Surveys (DHS) individual data</i>
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Description

Read and recode Demographic and Health Surveys (DHS) individual data

Usage

```
dhs(files, extra.vars = NULL, survey = FALSE, progress = TRUE)
```

Arguments

files	vector: a character vector containing the paths for one or more Individual Recode DHS data files (see details)
extra.vars	vector: a character vector containing the names of variables to be retained from the raw data
survey	boolean: returns an unweighted data.frame if FALSE, or a weighted svydesign object if TRUE
progress	boolean: display a progress bar

Details

The [Demographic and Health Surveys](#) (DHS) program regularly collects health data from population-representative samples in many countries using standardized surveys since 1984. The "individual recode" data files contain women's responses, while the "men recode" files contain men's responses. These files are available in SPSS, SAS, and Stata formats from <https://www.dhsprogram.com/>, however access requires a [free application](#). The `dhs()` function reads one or more of these files, extracts and recodes selected variables useful for studying childfree adults and other family statuses, then returns either an unweighted data frame, or a weighted [svydesign](#) object that can be analyzed using the survey package.

Although access to DHS data requires an application, the DHS program provides a [model dataset](#) for practice. The example provided below uses the model data file "ZZIR62FL.SAV", which contains fictitious women's data, but has the same structure as a real DHS data file. The example can be run without prior application for data access.

Known issues

- The SPSS-formatted files containing data from Gabon Recode 4 (GAIR41FL.SAV, GAMR41FL.SAV) and Turkey Recode 4 (TRIR41FL.SAV, TRMR41FL.SAV) contain encoding errors. Use the SAS-formatted files (GAIR41FL.SAS7BDAT, GAMR41FL.SAS7BDAT, TRIR41FL.SAS7BDAT, TRMR41FL.SAS7BDAT) instead.
- In some cases, DHS makes available individual recode data files for specific regions. For example, women's data from individual states in India from 1999 are contained in files named XXIR42FL.SAV, where the "XX" is a two-letter state code. The `dhs()` function has only been tested using whole-country files, and may not perform as expected for regional files.

- Variables containing women's responses in the individual recode files begin with v, while variables containing men's responses in the men recode files begin with mv. When applying `dhs()` to both female and male data, these are automatically harmonized. However, if extra variables are requested using the `extra.vars` option, be sure to specify both names (e.g. `extra.vars = c("v201", "mv201")`).
- If `survey = TRUE`, then `(m)v021` and `(m)v023` are used as the cluster and strata indicators, respectively. This is appropriate for most surveys, however there are a few exceptions. Additional information about analyzing DHS data using weights is available [here](#) and in the documentation provided with the downloaded data files.

Value

A data frame or weighted `svydesign` object containing variables described in the codebook available using `vignette("codebooks")` if you are offline, or if the requested data are otherwise unavailable, `NULL` is returned.

Examples

```
unweighted <- dhs(files = c("ZZIR62FL.SAV"), extra.vars = c("v201")) #Request unweighted data
if (!is.null(unweighted)) { #If data was available...
  round(table(unweighted$famstat)/nrow(unweighted),3) #Fraction of respondents w/ each family status
}

weighted <- dhs(files = c("ZZIR62FL.SAV"), survey = TRUE) #Request weighted (example) data
if (!is.null(weighted)) { #If data was available...
  survey::svymean(~famstat, weighted, na.rm = TRUE) #Estimated prevalence of each family status
}
```

nsfg

Read and recode National Survey of Family Growth (NSFG) data

Description

Read and recode National Survey of Family Growth (NSFG) data

Usage

```
nsfg(years, survey = FALSE, keep_source = FALSE, progress = TRUE)
```

Arguments

<code>years</code>	vector: a numeric vector containing the starting year of NSFG waves to include (2002, 2006, 2011, 2013, 2015, 2017)
<code>survey</code>	boolean: returns an unweighted data.frame if FALSE, or a weighted <code>svydesign</code> object if TRUE
<code>keep_source</code>	boolean: keep the raw variables used to construct <code>want_cf</code> and <code>famstat</code>
<code>progress</code>	boolean: display a progress bar

Details

The U.S. Centers for Disease Control **National Survey of Family Growth** (NSFG) regularly collects fertility and other health information from a population-representative sample of adults in the United States. Between 1973 and 2002, the NSFG was conducted periodically. Starting in 2002, the NSFG transitioned to continuous data collection, releasing data in multi-year waves (e.g., 2006-2010, 2011-2013). The `nsfg()` function reads the raw data from CDC's website, extracts and recodes selected variables useful for studying childfree adults and other family statuses, then returns either an unweighted data frame, or a weighted design object that can be analyzed using the survey package.

Notes

- Starting in 2006, "hispanic" was a response option for race, however "hispanic" is not a racial category, but an ethnicity. When a respondent chose this option, their actual race is unknown.
- The NSFG manual explains that "sample sizes for a single year are too small to provide estimates with adequate levels of precision," and therefore recommends avoiding analysis of data from single years. Instead, these data are designed to be analyzed by wave using the provided sampling weights. The `nsfg()` function provides weights for analysis of single waves, however alternate weights are available **from the CDC** for users who wish to combine multiple waves.

Value

A data frame or weighted `svydesign` object containing variables described in the codebook available using `vignette("codebooks")` If you are offline, or if the requested data are otherwise unavailable, NULL is returned.

Examples

```
unweighted <- nsfg(years = 2017) #Request unweighted data
if (!is.null(unweighted)) { #If data was available...
  table(unweighted$famstat) / nrow(unweighted) #Fraction of respondents with each family status
}

weighted <- nsfg(years = 2017, survey = TRUE) #Request weighted data
if (!is.null(weighted)) { #If data was available...
  survey::svymean(~famstat, weighted, na.rm = TRUE) #Estimated prevalence of each family status
}
```

Description

Read and recode Michigan State of the State (SOSS) data

Usage

```
soss(waves, extra.vars = NULL, survey = FALSE, progress = TRUE)
```

Arguments

waves	vector: a numeric vector containing the SOSS waves to include (currently available: 79, 82, 84, 85, 86)
extra.vars	vector: a character vector containing the names of variables to be retained from the raw data
survey	boolean: returns an unweighted data.frame if FALSE, or a weighted svydesign object if TRUE
progress	boolean: display a progress bar

Details

The [State of the State Survey](#) (SOSS) is regularly collected by the Institute for Public Policy and Social Research (IPPSR) at Michigan State University (MSU). Each wave is collected from a sample of 1000 adults in the US state of Michigan, and includes sampling weights to obtain a sample that is representative of the state's population with respect to age, gender, race, and education. The `soss()` function reads the raw data from IPPSR's website, extracts and recodes selected variables useful for studying childfree adults and other family statuses, then returns either an unweighted data frame, or a weighted design object that can be analyzed using the survey package. Questions necessary for identifying childfree adults have been asked in five waves, which each include unique questions that may be of interest:

- [Wave 79](#) (May 2020) - Neighborhoods, Health care, COVID, Personality
- [Wave 82](#) (September 2021) - Trust in government, Critical Race Theory
- [Wave 84](#) (April 2022) - Trust in scientists, Autonomous vehicles, Morality
- [Wave 85](#) (September 2022) - Reproductive rights, Race equity
- [Wave 86](#) (December 2022) - Education, Infrastructure

Notes

- Wave 79 did not include a "do not know" option for selected questions. Therefore, it is not possible to identify "undecided" or "ambivalent non-parent" respondents. This may lead other family status categories to be inflated.
- Wave 82 originally included a 500 person oversample of parents, but they are excluded from `nsfg(wave==82)`.
- The provided sampling weights are designed to be used in the analyses of individual waves. Combining data from multiple waves may require using adjusted weights.

Value

A data frame or weighted [svydesign](#) object containing variables described in the codebook available using `vignette("codebooks")`. If you are offline, or if the requested data are otherwise unavailable, NULL is returned.

Examples

```
unweighted <- soss(waves = 86) #Request unweighted data
if (!is.null(unweighted)) { #If data was available...
  table(unweighted$famstat) / nrow(unweighted) #Fraction of respondents with each family status
}

weighted <- soss(waves = 86, survey = TRUE) #Request weighted data
if (!is.null(weighted)) { #If data was available...
  survey::svymean(~famstat, weighted, na.rm = TRUE) #Estimated prevalence of each family status
}
```

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