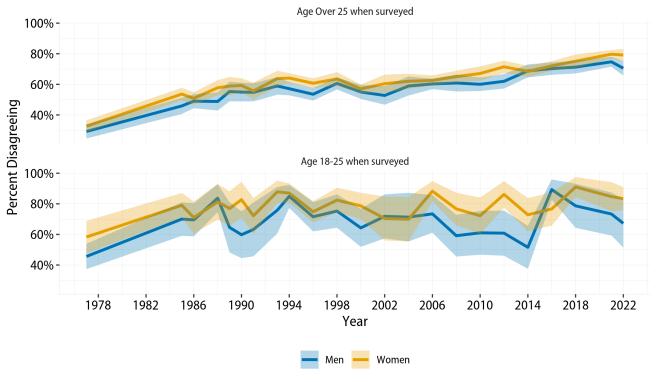
## gssr



The General Social Survey Cumulative Data (1972-2022, release 2a) and Panel Data files packaged for easy use in R. The companion package to gssr (https://github.com/kjhealy/gssr) is gssrdoc (https://kjhealy.github.io/gssrdoc), which integrates the GSS codebook into R's help system. I recommend you install both packages.

Disagreement with the statement, 'It is much better for everyone involved if the man is the achiever outside the home and the woman takes care of the home and family'



Kieran Healy http://socviz.co.

Data source: General Social Survey

## Installation

gssr (https://github.com/kjhealy/gssr) is a data package, bundling several datasets into a convenient format. The relatively large size of the data in the package means it is not suitable for hosting on CRAN (https://cran.r-project.org/), the core R package repository. The same is true of {gssrdoc}.

#### Install via R-Universe

# Install 'gssr' from 'ropensci' universe

<u>install.packages</u>('gssr', repos =

My R Universe (https://kjhealy.r-universe.dev/) provides binary packages for gssr (https://github.com/kjhealy/gssr) and {gssrdoc}. To install both packages, copy and paste the following code to the R console:

c('https://kjhealy.r-universe.dev', 'https://cloud.r-project.org'))

```
# Also recommended: install 'gssrdoc' as well
install.packages('gssrdoc', repos =
    c('https://kjhealy.r-universe.dev', 'https://cloud.r-project.org'))
```

Because the packages have dependencies that are on CRAN, we add CRAN as well as the R Universe to the repos argument.

The binary packages will install noticeably quicker than building the package from source. Plus, you can use <u>install.packages()</u> directly.

#### Install direct from GitHub

You can also install gssr from GitHub (https://github.com/kjhealy/gssr) with:

```
remotes::install_github("kjhealy/gssr")
```

## Loading the data

```
library(gssr)
#> Warning: package 'gssr' was built under R version 4.3.3
#> Package loaded. To attach the GSS data, type data(gss_all) at the console.
#> For the codebook, type data(gss_dict).
#> For the panel data and documentation, type e.g. data(gss_panel08_long) and dat
#> For help on a specific GSS variable, type ?varname at the console.
```

#### Single GSS years

You can get the data for any single GSS year by using <code>gss\_get\_yr()</code> to download it from NORC and put it directly into a tibble.

```
gss18 <- <u>gss_get_yr</u>(2018)
#> Fetching: https://gss.norc.org/documents/stata/2018_stata.zip
```

```
gss18
#> # A tibble: 2,348 × 1,068
```

hrs1

40

40

#> year id wrkstat <dbl+lbl> <dbl> <dbl+lbl> <dbl+lbl> #> #> 1 2018

#>

#>

#>

#>

#>

#>

#>

#>

#> #

#> #

#> #

#> #

#> #

data(gss\_all)

2 2018

3 2018

4 2018

5 2018

6 2018

7 2018

8 2018

9 2018

#> # i 2,338 more rows

#> 10 2018

1 3 [with ... NA(i) [iap] 3 1 [worki...

2 5 [retir... NA(i) [iap] NA(i) [iap] 4 1 [worki...

5 5 [retir... NA(i) [iap] NA(i) [iap] 6 5 [retir... NA(i) [iap] NA(i) [iap] 7 1 [worki…

8 1 [worki... 9 1 [worki…

10 1 [worki...

40 prestg105plus <dbl+lbl>, indus10 <dbl+lbl>, marital <dbl+lbl>,

martype <dbl+lbl>, divorce <dbl+lbl>, widowed <dbl+lbl>,

cowrksta <dbl+lbl>, cowrkslf <dbl+lbl>, coevwork <dbl+lbl>,

cohrs1 <dbl+lbl>, cohrs2 <dbl+lbl>, spwrkslf <dbl+lbl>, ...

35 89 [89+... NA(i) [iap] NA(i) [iap] 2 [som... 2 [pr 40 #> # i 1,060 more variables: occ10 <dbl+lbl>, prestq10 <dbl+lbl>,

NA(i) [iap] NA(i) [iap] 1 [sel... 2 [pr NA(i) [iap] NA(i) [iap] 2 [som... 2 [pr

hrs2

<dbl+lbl>

41

NA(i) [iap] NA(i) [iap] 2 [som... 2 [pr NA(i) [iap] NA(i) [iap] 2 [som... 1 [go

1 [yes] 2 [som... 2 [pr

evwork

<dbl+lbl> <dbl+l> <dbl+

NA(i) [iap] 2 [som... 2 [pr

NA(i) [iap] NA(i) [iap] 2 [som... 2 [pr 1 [yes] 2 [som... 2 [pr 1 [yes] 2 [som... 2 [pr

wrkslf wrkgo

spwrksta <dbl+lbl>, sphrs1 <dbl+lbl>, sphrs2 <dbl+lbl>, spevwork <dbl+lbl>

# The Cumulative Data File

# The GSS cumulative data file is large. It is included in gssr but not loaded by default when you invoke

the package. (That is, gssr does not use R's "lazy loading" facility. The data file is too big to do this without error.) To load it (or the other) datasets, first load the library and then use <a href="mailto:data()">data()</a> to make the data available. For example, load the cumulative GSS file like this:

This will take a moment. Once it is ready, the gss\_all object is available to use in the usual way:

4 1 [workin... NA(i) [iap] NA(i) [iap] #> 4 1972 NA(i) 1 57 5 1972 5 7 [keepin... NA(i) [iap] NA(i) [iap] 1 [yes] 385 40 #> 6 1 [workin... NA(i) [iap] NA(i) [iap] NA(i) [iap] #> 6 1972 281 49 7 1 [workin... NA(i) [iap] NA(i) [iap] NA(i) 7 1972 [iap] 522 41 #> 8 1972 8 1 [workin... NA(i) [iap] NA(i) [iap] NA(i) 36 #> [iap] 314 9 1972 9 2 [workin... NA(i) [iap] NA(i) [iap] NA(i) [iap] 912 26 #> #> 10 1972 10 1 [workin... NA(i) [iap] NA(i) [iap] NA(i) [iap] 984 18 # > # i 72,380 more rows# i 6,686 more variables: wrkslf <dbl+lbl>, wrkgovt <dbl+lbl>, commute <dbl+lbl>, industry <dbl+lbl>, occ80 <dbl+lbl>, prestg80 <dbl+lbl> #> # indus80 <dbl+lbl>, indus07 <dbl+lbl>, occonet <dbl+lbl>, found <dbl+lbl>, #> # occ10 <dbl+lbl>, occindv <dbl+lbl>, occstatus <dbl+lbl>, occtag <dbl+lbl>, #> # prestg10 <dbl+lbl>, prestg105plus <dbl+lbl>, indus10 <dbl+lbl>, #> # indstatus <dbl+lbl>, indtag <dbl+lbl>, marital <dbl+lbl>, ... #> #

hrs1

<dbl+lbl>

2 5 [retire... NA(i) [iap] NA(i) [iap]

3 2 [workin... NA(i) [iap] NA(i) [iap]

hrs2

1 1 [workin... NA(i) [iap] NA(i) [iap] NA(i) [iap]

<dbl+lbl>

evwork

<dbl+lbl>

NA(i) [iap]

1 [yes]

occ

205

441

270

presti

<dbl> <dbl+l

50

45

44

# Integrated Help with gssrdoc

gss\_all

vear

1 1972

2 1972

3 1972

#>

#>

#>

#>

#>

 $\#> \# A \text{ tibble: } 72,390 \times 6,694$ 

<dbl+lbl> <dbl> <dbl+lbl>

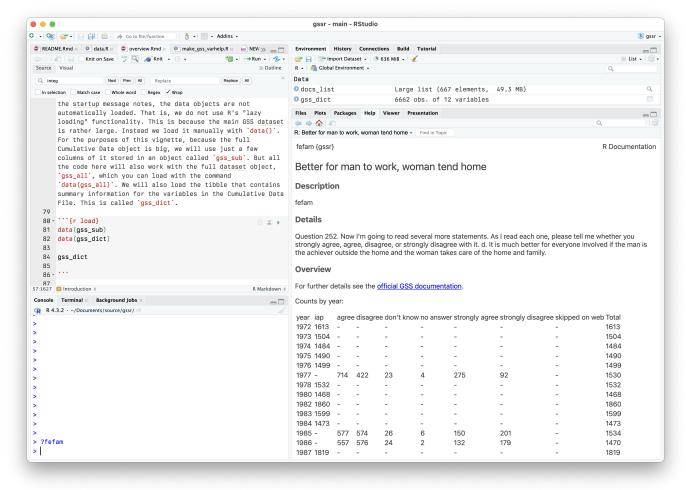
id wrkstat

gssr (https://github.com/kjhealy/gssr)'s companion package, gssrdoc (https://kjhealy.github.io/gssrdoc/)

particularly convenient in an IDE such as RStudio or Microsoft Visual Studio.

provides documentation for all GSS variables in the cumulative data file via R's help system. You can browse variables by name in the package's help file or type? followed by the name of the variable at the console to get a standard R help page containing information on the variable, the values it takes and

the console to get a standard R help page containing information on the variable, the values it takes and (in most cases) a crosstabulation of the variable's values for each year of the GSS. This facility is



## Which questions were asked in which years?

We often want to know which years a question or group of questions was asked. We can find this out for one or more variables with <code>gss\_which\_years()</code>.

```
#> # A tibble: 33 x 2
 #>
       vear fefam
       <dbl> <lal>
 #>
 #> 1 1972 FALSE
 #> 2 1973 FALSE
 #> 3 1974 FALSE
 #> 4 1975 FALSE
 #> 5 1976 FALSE
 #> 6
        1977 TRUE
 #> 7 1978 FALSE
 #> 8
        1980 FALSE
 #> 9 1982 FALSE
 #> 10 1983 FALSE
 #> # ... with 24 more rows
When querying more than one variable, use <u>c()</u>:
```

gss\_which\_years(gss\_all, fefam)

```
gss_all |>
  gss which years(c(industry, indus80, wrkgovt, commute))
                                                                  |>
  print(n = Inf)
  # A tibble: 34 × 5
##
##
                  industry indus80 wrkgovt commute
      year
      <dbl+lbl> <lgl>
                            <lgl>
                                     <lgl>
                                              <lgl>
##
##
    1 1972
                  TRUE
                            FALSE
                                     FALSE
                                              FALSE
##
    2 1973
                  TRUE
                            FALSE
                                     FALSE
                                              FALSE
    3 1974
                  TRUE
                                              FALSE
##
                            FALSE
                                     FALSE
##
    4 1975
                  TRUE
                            FALSE
                                     FALSE
                                              FALSE
##
    5 1976
                  TRUE
                            FALSE
                                     FALSE
                                              FALSE
##
      1977
                  TRUE
                            FALSE
                                     FALSE
                                              FALSE
    6
##
    7
      1978
                  TRUE
                            FALSE
                                     FALSE
                                              FALSE
##
      1980
                  TRUE
                            FALSE
                                     FALSE
                                              FALSE
    8
##
    9
      1982
                  TRUE
                            FALSE
                                     FALSE
                                              FALSE
   10
      1983
                            FALSE
                                     FALSE
##
                  TRUE
                                              FALSE
   11
      1984
##
                  TRUE
                            FALSE
                                     FALSE
                                              FALSE
   12 1985
                                     TRUE
##
                  TRUE
                            FALSE
                                              FALSE
##
   13
      1986
                  TRUE
                            FALSE
                                     TRUE
                                              TRUE
   14 1987
##
                  TRUE
                            FALSE
                                     FALSE
                                              FALSE
##
   15 1988
                  TRUE
                            TRUE
                                     FALSE
                                              FALSE
   16
      1989
##
                  TRUE
                            TRUE
                                     FALSE
                                              FALSE
   17
      1990
                  TRUE
                                     FALSE
                                              FALSE
##
                            TRUE
##
   18 1991
                  FALSE
                            TRUE
                                     FALSE
                                              FALSE
##
   19
      1993
                            TRUE
                                     FALSE
                                              FALSE
                  FALSE
   20 1994
##
                  FALSE
                            TRUE
                                     FALSE
                                              FALSE
                  FALSE
##
   21 1996
                                     FALSE
                            TRUE
                                              FALSE
##
   22
      1998
                  FALSE
                                     FALSE
                                              FALSE
                            TRUE
   23
##
      2000
                  FALSE
                            TRUE
                                     TRUE
                                              FALSE
##
   24
      2002
                  FALSE
                            TRUE
                                     TRUE
                                              FALSE
   25
      2004
##
                  FALSE
                            TRUE
                                     TRUE
                                              FALSE
##
   26
      2006
                  FALSE
                                     TRUE
                                              FALSE
                            TRUE
   27
      2008
##
                  FALSE
                            TRUE
                                     TRUE
                                              FALSE
   28 2010
                  FALSE
##
                            TRUE
                                     TRUE
                                              FALSE
##
   29
      2012
                  FALSE
                            FALSE
                                     TRUE
                                              FALSE
   30
      2014
##
                  FALSE
                            FALSE
                                     TRUE
                                              FALSE
   31 2016
##
                  FALSE
                            FALSE
                                              FALSE
                                     TRUE
   32 2018
##
                  FALSE
                            FALSE
                                     TRUE
                                              FALSE
##
   33 2021
                  FALSE
                            FALSE
                                     FALSE
                                              FALSE
   34 2022
##
                  FALSE
                            FALSE
                                     FALSE
                                              FALSE
```

### Panel data

current rotating panel design began in 2006. A panel of respondents were interviewed that year and followed up on for further interviews in 2008 and 2010. A second panel was interviewed beginning in 2008, and was followed up on for further interviews in 2010 and 2012. And a third panel began in 2010,

In addition to the Cumulative Data File, the gssr package also includes the GSS's panel data. The

with follow-up interviews in 2012 and 2014. The gssr package provides three datasets, one for each of three-wave panels. They are gss\_panel06\_long, gss\_panel08\_long, and gss\_panel10\_long. The datasets are provided by the GSS in wide format but (as their names suggest) they are packaged here

in long format. The 2020 panel is an exception to this, for reasons described below. The conversion was carried out using the panelr package (https://panelr.jacob-long.com) and its long\_panel() function.

Conversion from long back to wide format is possible with the tools provided in panelr.

The panel data objects must be loaded in the same way as the cumulative data file, using <a href="mailto:data()">data()</a>. data("gss\_panel06\_long")

```
gss_panel06_long
#> # A tibble: 6,000 × 1,572
```

2 9

3 9

4 10

5 10

6 10

7 11

8 11

9 11

#> # i 5,990 more rows

*#*> 10 12

#>

#>

#>

#>

#>

#>

#>

#>

#> #

#> #

#> #

#> #

firstid wave ballot #>

<fct> <dbl> <dbl+lbl> #> 1 9 1 3 [BALLOT ... 2 [ALT... #>

2 3 [BALLOT ... 2 [ALT...

1 1 [BALLOT ... 1 [STA...

2 1 [BALLOT ... 1 [STA...

3 1 [BALLOT ... 1 [STA...

1 3 [BALLOT ... 2 [ALT...

2 3 [BALLOT ... 2 [ALT...

3 3 [BALLOT ... 2 [ALT...

1 1 [BALLOT ... 2 [ALT...

form

<dbl+l>

3 3 [BALLOT ... 2 [ALT...

1 1

<dbl>

1

1

1

1

1 501

1 501

1 501

1 501

formwt oversamp sampcode sample samptype

<dbl> <dbl+lb> <dbl+l> <dbl+lbl 9 [200... 2006 [20 9 [200... 2006 [20 9 [200... 2006 [20 9 [200... 2006 [20

9 [200... 2006 [20 9 [200... 2006 [20 9 [200... 2006 [20

9 [200... 2006 [20 9 [200... 2006 [20

9 [200... 2006 [20 #> # i 1,563 more variables: vstrat <dbl+lbl>, vpsu <dbl+lbl>, wtpan12 <dbl+lbl>,

letin1a <dbl+lbl>, abany <dbl+lbl>, abdefect <dbl+lbl>, abhlth <dbl+lbl>, abnomore <dbl+lbl>, abpoor <dbl+lbl>, abrape <dbl+lbl>, absingle <dbl+lbl>

acqblack <dbl+lbl>, acqbrnda <dbl+lbl>, acqchild <dbl+lbl>, ... #> # Panel data objects are regular tibbles. You do not need to use  $\,$  panelr  $\,$  to work with the data.

wtpan123 <dbl+lbl>, wtpannr12 <dbl+lbl>, wtpannr123 <dbl+lbl>,

accntsci <dbl+lbl>, acqasian <dbl+lbl>, acqattnd <dbl+lbl>,

<fct> <dbl> <dbl+lbl> <dbl+lbl> #> 1 1 1 1 [MALE] 1 #> 2 1 2 8001 #> 1 [MALE] 3 1 3 NA NA #> #> 4 2 1 2 1 [MALE] 5 2 2 8002 1 [MALE]

The column names in long format do not have wave identifiers. Rather, firstid and wave variables track the cases. The firstid variable is unique for every respondent in the panel and has no missing

values. The wave variable indexes responses from a given firstid panelist in each wave (if

observed). The id variable is from the GSS and indexes individuals within waves.

sex

1 [MALE]

1 [MALE]

1 [MALE]

1 [MALE]

1 [MALE]

gss\_panel06\_long |> select(wave, id) |> group\_by(wave) |> summarize(observed = n\_distinct(id), missing =  $\underline{sum}(\underline{is.na}(\underline{id}))$ #> # A tibble: 3 × 3 wave observed missing #> <dbl> <int> <int> #> #> 1 1 2000 0 #> 2 2 1537 464 #> 3 3 1277 724

data("gss\_panel08\_long")

#> # A tibble: 6,069 × 4 firstid wave id

select(firstid, wave, id, sex)

3 8001

2 8003

3 8002

3

1

1

We can look at attrition across waves with, e.g.:

gss\_panel08\_long

#>

#>

#>

#>

6 2

7 3

8 3

9 3

#> # i 6,059 more rows

**#> 10 4** 

# The 2020 Panel Data

The COVID-19 pandemic also affected the panel data design. In 2020, the GSS was run as two studies; namely, (1) a panel re-interview of past respondents from the 2016 and 2018 cross sectional GSS

studies (referred to as the 2016-2020 GSS Panel), and (2) an independent fresh cross-sectional address-based sampling push to web study (referred to as 2020 cross-sectional survey). The gssr

package provides the data for the first study as gss\_panel20. This study empaneled former 2016 and 2018 GSS respondents to answer a GSS questionnaire in 2020 (i.e., the 2016-2020 GSS panel). In the

\_1a appended, variables from 2018 (Wave 1b) have \_1b appended, and variables from 2020 (Wave 2) have 2 appended. Users can also track cases from 2016 and 2018, and reinterviews from 2020 with the variable samptype. data("gss\_panel20")

yearid fileversion panstat wtssall\_1a wtssall\_1b wtssall

<dbl>

0.957

0.478

0.957

1.91

1.44

1.44

0.957

0.957

0.957

0.957

<dbl>

NA

<db

1.0

0.5

2.1

NA

NA

NA

NA

NA

1.0

1.0

<dbl+1>

2016-2020 GSS Panel, variables only contain data from one of the three years. To differentiate between versions of each variable, they have been appended with suffixes. Variables from 2016 (Wave 1a) have

# > # i 5,205 more rows#> # i 4,289 more variables: wtssnr\_1a <dbl>, wtssnr\_1b <dbl>, wtssnr\_2 <dbl>, vstrat\_1a <dbl>, vstrat\_1b <dbl>, vstrat\_2 <dbl>, vpsu\_1a <dbl>, #> #

<chr>

1 2016 [sample from... 20160... GSS 2020 P... 1 [sel...

2 2016 [sample from... 20160... GSS 2020 P... 1 [sel...

3 2016 [sample from... 20160... GSS 2020 P... 0 [not...

4 2016 [sample from... 20160... GSS 2020 P... 1 [sel...

5 2016 [sample from... 20160... GSS 2020 P... 0 [not...

6 2016 [sample from... 20160... GSS 2020 P... 2 [sel...

7 2016 [sample from... 20160... GSS 2020 P... 0 [not...

8 2016 [sample from... 20160... GSS 2020 P... 1 [sel...

9 2016 [sample from... 20160... GSS 2020 P... 1 [sel...

#> 10 2016 [sample from... 20160... GSS 2020 P... 0 [not...

<chr>

mar7\_1a <dbl+lbl>, mar8\_1a <dbl+lbl>, mar9\_1a <dbl+lbl>, ...

vpsu\_1b <dbl>, vpsu\_2 <dbl>, year\_1a <int>, year\_1b <int>, year\_2 <int>,

id\_1a <dbl>, id\_1b <dbl>, id\_2 <dbl>, mar1\_1a <dbl+lbl>, mar2\_1a <dbl+lbl>

mar3\_1a <dbl+lbl>, mar4\_1a <dbl+lbl>, mar5\_1a <dbl+lbl>, mar6\_1a <dbl+lbl>

Unlike the other panels, these data are provided in wide format. Users are strongly encouraged to read the official documentation (https://gss.norc.org/Documents/codebook/2016-2020%20GSS%20Panel%20Codebook%20-%20R1a.pdf) at the NORC website.

The GSS and COVID-19

The GSS administrators have released a Methodological Primer (https://gss.norc.org/Documents/other/2021%20XSEC%20R1%20Methodological%20Primer.pdf) along

gss\_panel20

#>

#>

#>

#>

#>

#>

#>

#> #>

#>

#>

#> #

#> #

#> #

#> #

#> # A tibble: 5,215 × 4,296

samptype

<dbl+lbl>

with the Documentation and Codebook for the 2021 survey (https://gss.norc.org/Documents/codebook/GSS%202021%20Codebook%20R1.pdf) that users should

read carefully in connection with the effects of COVID-19 on data collection for the GSS. The Primer notes:

Since its inception, the GSS has conducted data collection via in-person interviews as its primary mode of data collection. The pandemic forced the GSS to change this design, moving from in-person to address- based sampling and a push-to-web methodology, with the bulk of the interview conducted online via a self- administered questionnaire.

We recommend our users include the one of the following statements when reporting on the GSS 2021 Cross-section data: *Total Survey Error Summary Perspective for the 2021 GSS Cross-section:* Changes in opinions, attitudes,

methodological changes made to the survey methodology during the COVID-19 global pandemic.

And,

In addition,

Suggested Statement to Include in Articles and Reports That Use GSS Data:

To safeguard the health of staff and respondents during the COVID-19

pandemic, the 2021 GSS data collection used a mail-to-web methodology

and behaviors observed in 2021 relative to historical trends may be due to

actual change in concept over time and/or may have resulted from

instead of its traditional in-person interviews. Research and interpretation done using the data should take extra care to ensure the analysis reflects actual changes in public opinion and is not unduly influenced by the change in data collection methods. For more information on the 2021 GSS methodology and its implications, please visit https://gss.norc.org/Get-The-Data (https://gss.norc.org/Get-The-Data)

# Further details

The package is documented at http://kjhealy.github.io/gssr/ (http://kjhealy.github.io/gssr/). The GSS homepage is at http://gss.norc.org/ (http://gss.norc.org/). While the gssr package incorporates the publicly-available GSS cumulative data file, this package is not associated with or endorsed by the National Opinion Research Center or the General Social Survey.

Developed by Kieran Healy (http://kieranhealy.org). Site built with pkgdown (https://pkgdown.r-lib.org/) 2.0.8. Using preferably (https://preferably.amirmasoudabdol.name/?source=footer) template.