Package 'atus'

October 28, 2018

Type Package

Title American Time Use Survey Data

Version 0.2

Date 2018-10-28

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Description Abridged data from the American Time Use Survey (ATUS) for years 2003-
2016. The ATUS is an annual survey conducted on a sample of individu-
als across the United States studying how individuals spent their time over the course of a day. In-
dividual respondents were interviewed about what activities they did, dur-
ing what times (rounded to 15 minute increments), at what locations, and in the pres-
ence of which individuals. The activities are subsequently encoded based on 3 sepa-
rate tier codes for classification. This package includes data from the multi-year ATUS Activi-
ties, ATUS-CPS, and ATUS Respondents files were included. Columns were se-
lected based on completeness of data as well as presence on the Frequently Used Vari-
ables list provided by the ATUS website. All activity codes (other than code '50' for 'Un-
able to Code') were included. Permission was obtained from the Bureau of Labor Statis-
tics for inclusion in this package. The full data can be obtained from <http://www.bls.gov/tus/>.

License GPL (>= 2)

LazyData TRUE

Depends R (>= 2.10)

RoxygenNote 6.1.0

NeedsCompilation no

Repository CRAN

Date/Publication 2018-10-28 21:50:03 UTC

R topics documented:

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atusact   *ATUS Respondent Daily Activity Summary (2003-2016)*

Description

A data frame with 2,094,140 observations on the following variables:

Usage

```
data(atusact)
```

Format

A data frame with 2,094,140 observations on the following:

tucaseid respondent id

tiercode activity tier code, in the format 'AABBCC', where 'AA' is the tier 1 activity code (1-18),
'BB' is the tier 2 activity code (0-99), and 'CC' is the numeric tier 3 activity code (0-99); see
tier codebook

dur total duration (in minutes) spent over the course of the day by the respondent in the given tier
code

#' @source Aggregated from ATUS Activity data file from https://www.bls.gov/tus/datafiles_
0316.htm with tier codebook at https://www.bls.gov/tus/lexiconnoex0316.pdf.

Examples

```
data(atusact)
# example activity: sleeping
#         tier 1 code = 01 (personal care)
#         tier 2 code = 01 (sleeping)
#         tier 3 code = all

# this is a data frame with all individuals that did some amount of sleeping
# on their diary day
sleeping <- atusact[atusact$tiercode >= 10100 & atusact$tiercode < 10200,]

# how many did not sleep?
length(unique(atusact$tucaseid)) - length(unique(sleeping$tucaseid))

# example activity: doing homework (for a class towards a degree)
#         tier 1 code = 06
#         tier 2 code = 03
#         tier 3 code = 01

hw <- atusact[atusact$tiercode == 60301,]
hist(hw$dur)
summary(hw$dur)
```

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atuscps *Current Population Survey for ATUS Households (2003-2016)*

Description

This is a 181,335 by 13 data frame containing information collected in the CPS about all individuals who were selected for and responded to the ATUS. The 'tucaseid' variable identifies unique households. Note that the information collected in this dataset was done so 2 to 5 months before the ATUS interview. Variables containing no more than 80% values missing were considered for inclusion, especially those found on the ATUS Frequently Used Variables list. The original CPS-ATUS file online contains information on all household members selected to participate in the ATUS; for the purpose of minimizing the size of the R package, we removed all non-respondents.

Usage

```
data(atuscps)
```

Format

A data frame with 181,335 observations on the following variables:

tucaseid household id

region region of household (definitions are listed in Appendix A of codebook) ('gereg')

state state of household ('gestfips')

sex respondent sex ('pesex')

age respondent age ('prtage'); prior to May 2004, 80 meant age 80+, afterwards, 85 meant age 85+

edu respondent education level, only available for adults ('peeduca')

race respondent race ('ptdtrace')

hispanic respondent identifies as hispanic? ('pehspnon')

country_born respondent's country of birth ('penatvty'), "US" means continental U.S. and "non-US" means otherwise

citizen citizenship status of respondent ('prcitshp')

marital respondent's marital status ('pemaritl')

home_type rent or own home ('hetenure')

famincome income in dollars of all family members aged 15+ in the past 12 months including work earnings, pensions, and dividends ('hefaminc' and 'hufaminc'), see codebook for details about topcoding, which has changed in October 2003

Source

ATUS-CPS data file from https://www.bls.gov/tus/datafiles_0316.htm with code book at https://www.bls.gov/tus/atuscpscodebk0316.pdf. A list of Frequently Used Variables can be found at https://www.bls.gov/tus/freqvariables.pdf.

Examples

```
data(atuscps)

# distribution of households across regions of the U.S.
# note that stratified sampling was done
barplot(table(atuscps$region))

barplot(table(atuscps$race), horiz=TRUE, las=1)

hist(atuscps$age)
```

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atusresp   *ATUS Respondent Information (2003-2016)*

Description

This is a 181,335 by 22 data frame containing information on the respondents, including their employment, household, and the diary day (day on which they were interviewed). The data frame here is taken from the ATUS 2003-2016 Respondent file. Variables containing no more than 90% values missing were considered for inclusion, especially those found on the ATUS Frequently Used Variables list.

Usage

```
data(atusresp)
```

Format

A data frame with 181,335 observations. The following variables (with lower-case original variable name in parentheses, if different from the variable name here, for ease of matching to the official codebook):

tucaseid respondent id

tuyear ATUS year

diary_mo 1-12, month of diary day in (derived from 'tudiarydate')

diary_day 1-31, day of diary day in (derived from 'tudiarydate')

holiday whether the diary day was a holiday ('trholiday')

occup_code occupation code ('trmjocc1'), see codebook for full unabbreviated list of categories

ind_code industry code ('trmjind1'), see codebook for full unabbreviated list of categories

labor_status labor force status ('telfs')

student_status whether or not the respondent is currently enrolled in a high school, college, or university ('teschenr')

ptft whether the respondent works part-time or full-time ('trdpftpt')

work_class class of work ('teio1cow')

hourly_wage hourly earnings at main job ('trernhly')

weekly_earn weekly earnings at main job ('trernwa')

work_hrs_week number of hours worked per week ('tehruslt')

mult_jobs had more than 1 jobs in 7 days prior to interview ('temjot')

partner_hh presence of respondent's spouse/unmarried partner in the household ('trsppres')

partner_works employment status of spouse/partner ('tespempnot')

partner_ptft whether the spouse/partner works part-time or full-time ('trspftpt')

hh_size number of people living in household ('trnumhou')

hh_child presence of household children aged < 18 ('trhhchild')

hh_child_youngest_age age of youngest household child < 18 ('tryhhchild')

wt ATUS final weight ('tufnwgtp')

Source

ATUS Respondent data file from https://www.bls.gov/tus/datafiles_0316.htm with code book at https://www.bls.gov/tus/atusintcodebk0316.pdf. A list of Frequently Used Variables can be found at https://www.bls.gov/tus/freqvariables.pdf.

Examples

```
data(atusresp)

hist(atusresp$weekly_earn, main="Distribution of Weekly Earnings of ATUS Respondents (all years)")
boxplot(weekly_earn ~ tuyear, data=atusresp, horizontal=TRUE, las=1,
        main="Weekly Earnings by Year", xlab="Year", ylab="Weekly Earnings")
```

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