Package 'SDaA'

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Type Package Title Sampling: Design and Analysis Version 0.1-5 Date 2022-04-11 Author Tobias Verbeke Maintainer Tobias Verbeke <tobias.verbeke@openanalytics.eu> Description Functions and Datasets from Lohr, S. (1999), Sampling: Design and Analysis, Duxbury. Suggests survey, ggplot2 (>= 0.8.2) License GPL-3 LazyData Yes Collate 'agpop.R' 'agsrs.R' 'agstrat.R' 'anthrop.R' 'anthsrs.R' 'anthuneq.R' 'audit.R' 'books.R' 'certify.R' 'coots.R' 'counties.R' 'divorce.R' 'golfsrs.R' 'htpop.R' 'htsrs.R' 'htstrat.R' 'journal.R' 'lahiri.design.R' 'measles.R' 'ncvs.R' 'nybight.R' 'otters.R' 'ozone.R' 'samples.R' 'seals.R' 'selectrs.R' 'statepop.R' 'statepps.R' 'syc.R' 'teachers.R' 'teachmi.R' 'teachnr.R' 'winter.R' **Encoding** UTF-8 **Repository** CRAN RoxygenNote 7.1.2

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Index

agpop

Data from the U.S. 1992 Census of Agriculture

Description

Data from the U.S. 1992 Census of Agriculture

Usage

agpop

agsrs

Format

Data frame with the following 15 variables:

county county name

state state abbreviation

acres92 number of acres devoted to farms, 1992

acres87 number of acres devoted to farms, 1987

acres82 number of acres devoted to farms, 1982

farms92 number of farms, 1992

farms87 number of farms, 1987

farms82 number of farms, 1982

largef92 number of farms with 1000 acres or more, 1992

largef87 number of farms with 1000 acres or more, 1987

largef82 number of farms with 1000 acres or more, 1982

smallf92 number of farms with 9 acres or fewer, 1992

smallf87 number of farms with 9 acres or fewer, 1987

smallf82 number of farms with 9 acres or fewer, 1982

region factor with levels S (south), W (west), NC (north central), NE (northeast)

Source

U.S. 1992 Census of Agriculture

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 437.

agsrs

Data from a SRS of size 300 from the U.S. 1992 Census of Agriculture

Description

Data from a SRS of size 300 from the U.S. 1992 Census of Agriculture

Usage

agsrs

agstrat

Format

Data frame with the following 14 variables:

county county name
state state abbreviation
acres92 number of acres devoted to farms, 1992
acres87 number of acres devoted to farms, 1987
acres82 number of acres devoted to farms, 1982
farms92 number of farms, 1992
farms87 number of farms, 1987
farms82 number of farms, 1982
largef92 number of farms with 1000 acres or more, 1992
largef87 number of farms with 1000 acres or more, 1982
smallf92 number of farms with 9 acres or fewer, 1987
smallf82 number of farms with 9 acres or fewer, 1982

Source

U.S. 1992 Census of Agriculture

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 437.

agstrat	Data from a stratified random sample of size 300 from the U.S. 1992
	Census of Agriculture.

Description

Data from a stratified random sample of size 300 from the U.S. 1992 Census of Agriculture.

Usage

agstrat

anthrop

Format

Data frame with the following 17 variables:

county county name

state state abbreviation

acres92 number of acres devoted to farms, 1992

acres87 number of acres devoted to farms, 1987

acres82 number of acres devoted to farms, 1982

farms92 number of farms, 1992

farms87 number of farms, 1987

farms82 number of farms, 1982

largef92 number of farms with 1000 acres or more, 1992

largef87 number of farms with 1000 acres or more, 1987

largef82 number of farms with 1000 acres or more, 1982

smallf92 number of farms with 9 acres or fewer, 1992

smallf87 number of farms with 9 acres or fewer, 1987

smallf82 number of farms with 9 acres or fewer, 1982

region factor with levels S (south), W (west), NC (north central), NE (northeast)

rn random numbers used to select sample in each stratum

weight sampling weighs for each county in sample

Source

U.S. 1992 Census of Agriculture

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 437.

anthrop

Length of Left Middle Finger and Height for 3000 Criminals

Description

Length of left middle finger and height for 3000 criminals

Usage

anthrop

anthsrs

Format

Data frame with the following 2 variables:

finger length of left middle finger (cm)

height height (inches)

Source

Macdonell, W. R. (1901). On criminal anthropometry and the identification of criminals, *Biometrika*, 1: 177–227.

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 438.

anthsrs

Length of Left Middle Finger and Height for an SRS of Size 200

Description

Length of left middle finger and height for an SRS of 200 criminals from the anthrop dataset

Usage

anthsrs

Format

Data frame with the following 2 variables:

finger length of left middle finger (cm)

height height (inches)

Source

Macdonell, W. R. (1901). On criminal anthropometry and the identification of criminals, *Biometrika*, 1: 177–227.

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 438.

anthuneq

Length of Left Middle Finger and Height for an Unequal-Probability Sample of Size 200

Description

Length of left middle finger and height for an unequal-probability sample of criminals of size 200 from the anthrop dataset. The probability of selection, psi[i], was proportional to 24 for y < 65, 12 for y = 65, 2 for y = 66 or 67, and 1 for y > 67.

Usage

anthuneq

Format

Data frame with the following 3 variables:

finger length of left middle finger (cm)

height height (inches)

prob probability of selection

Source

Macdonell, W. R. (1901). On criminal anthropometry and the identification of criminals, *Biometrika*, 1: 177–227.

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 438.

audit

Selection of Accounts for Audit in Example 6.11

Description

Selection of Accounts for Audit in Example 6.11

Usage

audit

books

Format

Data frame with the following 6 variables:

account audit unit

bookval book value of account

cumbv cumulative book value

rn1 random number 1 selecting account

rn2 random number 2 selecting account

rn3 random number 3 selecting account

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 439.

books

Data from Home Owner's Survey on Total Number of Books

Description

Data from home owner's survey on total number of books

Usage

books

Format

Data frame with the following 6 variables:

shelf shelf number

number number of the book selected

purchase purchase cost of the book

replace replacement cost of book

Note

Used in Exercise 6 of Chapter 5.

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 439.

certify

Description

Data from the 1994 Survey of ASA Membership on Certification

Usage

certify

Format

Data frame with the following 11 variables:

- **certify** should the ASA develop some form of certification? factor with levels yes, possibly, noopinion, unlikely and no
- **approve** would you approve of a certification program similar to that described in the July 1993 issue of *Amstat News*? factor with levels yes, possibly, noopinion, unlikely and no
- **speccert** Should there be specific certification programs for statistics subdisciplines? factor with levels yes, possibly, noopinion, unlikely and no
- **wouldyou** If the ASA developed a certification program, would you attempt to become certified? factor with levels yes, possibly, noopinion, unlikely and no
- **recert** If the ASA offered certification, should recertification be required every several years? factor with levels yes, possibly, noopinion, unlikely and no
- subdisc Major subdiscipline; factor with levels BA (Bayesian), BE (business and economic), BI (biometrics), BP (biopharmaceutical), CM (computing), EN (environment), EP (epidemiology), GV (government), MR (marketing), PE (physical and engineering), QP (quality and productivity), SE (statistical education), SG (statistical graphics), SP (sports), SR (survey research), SS (social statistics), TH (teaching statistics in health sciences), O (other)
- **college** Highest collegiate degree; factor with levels B (BS or BA), M (MS), N (none), P (PhD) and O (other)
- employ Employment status; factor with levels E (employed), I (in school), R (retired), S (self-employed), U (unemployed) and O (other)
- **workenv** Primary work environment; factor with levels A (academia), G (government), I (industry), O (other)
- **workact** Primary work activity; factor with levels C (consultant), E (educator), P (practitioner), R (researcher), S (student) and O (other)

yearsmem For how many years have you been a member of ASA?

Note

The full dataset is on Statlib

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 439. http://lib.stat. cmu.edu/asacert/certsurvey

coots

Egg Size from Coots

Description

Selected information on egg size from coots, from a study by Arnold (1991). Data courtesy of Todd Arnold.

Usage

coots

Format

Data frame with the following 11 variables:

clutch clutch number from which eggs were subsampled

csize number of eggs in clutch (Mi)

length length of egg (mm)

breadth maximum breadth of egg (mm)

volume calculated as 0.00507 x length x breadth^2

tmt received supplemental feeding? factor with levels no and yes

Note

Not all observations are used for this data set, so results may not agree with those in Arnold (1991)

Source

Arnold, T.W. (1991). Intraclutch variation in egg size of American Coots, The Condor, 93: 19-27

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 440.

counties

Description

Data from an SRS of 100 of the 3141 Counties in the U.S.

Usage

counties

Format

Data frame with the following 18 variables:

RN random number used to select the country

state state (two-letter abbreviation) county county landarea land area, 1990 (square miles) totpop total population, 1992 physician active nonfederal physicians on Jan. 1, 1990 enroll school enrollment in elementary or high school, 1990 percpub percent of school enrollment in public schools civlabor civilian labor force, 1991 unemp number unemployed, 1991 farmpop farm population, 1990 numfarm number of farms, 1987 farmacre acreage in farms, 1987 fedgrant total expenditures in federal funds and grants, 1992 (millions of dollars) fedciv civilians employed by federal government, 1990 milit military personnel, 1990 veterans number of veterans, 1990 percviet percentage of veterans from Vietnam era, 1990

Source

U.S. Bureau of Census, 1994

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 440.

divorce

Description

Data from a sample of divorce records for states in the Divorce Registration Area (National Center for Health Statistics 1987)

Usage

divorce

Format

Data frame with the following 20 variables:

state state name **abbrev** state abbreviation samprate sampling rate for state numrecs number of records sampled in state hsblt20 number of records in sample with husband's age < 20hsb2024 number of records with 20 <= husband's age <= 24 hsb2529 number of records with 25 <= husband's age <= 29 hsb3034 number of records with 30 <= husband's age <= 34 hsb3539 number of records with 35 <= husband's age <= 39 hsb4044 number of records with 40 <= husband's age <= 44 hsb4549 number of records with 45 <= husband's age <= 49 hsbge50 number of records with wife's age >= 50 wflt20 number of records in sample with wife's age < 20wf2024 number of records with 20 <= wife's age <= 24 wf2529 number of records with 25 <= wife's age <= 29 wf3034 number of records with 30 <= wife's age <= 34 wf3539 number of records with 35 <= wife's age <= 39 wf4044 number of records with 40 <= wife's age <= 44 wf4549 number of records with 45 <= wife's age <= 49 wfge50 number of records with wife's age >= 50

Source

National Center of Health Statistics (1987). TODO

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 440.

golfsrs

Description

Simple Random Sample (SRS) of 120 golf courses taken from the population of the (now defunct) Website www.golfcourse.com

Usage

golfsrs

Format

Data frame with the following 16 variables:

RN random number used to select golf course for sample

state state name

holes number of holes

type type of course; factor with levels priv (private), semi (semi-private), pub (public), mili
 (military) and res (resort)

yearblt year the course was built

wkday18 greens fee for 18 holes during week

wkday9 greens fee for 9 holes during week

wkend18 greens fee for 18 holes on weekend

wkend9 greens fee for 9 holes on weekend

backtee back-tee yardage

rating course rating

par par for course

cart18 golf cart rental fee for 18 holes

cart9 golf cart rental fee for 9 holes

caddy Are caddies available? factor with levels yes and no

pro Is a golf pro available? factor with levels yes and no

Source

The now defunct website golfcourse.com (https://web.archive.org/web/19991108203827/ http://golfcourse.com/)

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and TODO.

htpop

Description

Height and gender of 2000 persons in an artificial population

Usage

htpop

Format

height height of person, cm **gender** factor with levels F (female) and M (male)

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. 230-234 and 441.

htsrs

Height and gender for an SRS of 200 persons, taken from htpop

Description

Height and gender for an SRS of 200 persons, taken from htpop

Usage

htsrs

Format

rn random number used to select the unit

height height of person, cm

gender factor with levels F (female) and M (male)

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. 230-234 and 442.

htstrat

Description

Height and gender for a stratified random sample of 160 women and 40 men taken from the htpop population

Usage

htstrat

Format

rn random number used to select the unitheight height of person, cmgender factor with levels F (female) and M (male)

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. 230-234 and 442.

journal

Types of Sampling Used for Articles in a Sample of Journals

Description

Types of Sampling Used for Articles in a Sample of Journals

Usage

journal

Format

Data frame with the following 3 variables:

numemp number of articles in 1988 that used samplingprob number of articlues that used probability samplingnonprob number of articles that used nonprobability sampling

Source

Jacoby and Handlin (1991). TODO

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 442.

lahiri.design

Description

Draw Samples Using Lahiri's Method

Usage

lahiri.design(relsize, n, clnames = seq(along = relsize))

Arguments

relsize	vector of relative sizes of population PSUs
n	desired sample size
clnames	vector of PSU names for population

Value

clusters vector of n PSUs selected with replacement and with probability proportional to relsize

Note

Original code from Lohr (1999), p. 452 – 453.

Author(s)

Sharon Lohr, slightly modified by Tobias Verbeke

References

Lahiri, D. B. (1951). A method of sample selection providing unbiased ratio estimates, *Bulletin of the International Statistical Institute*, 33: 133 – 140.

measles

Survey of Parents of Children Non-Immunized against Measles

Description

Roberts et al. (1995) report on the results of a survey of parents whose children had not been immunized against measles during a recent campaign to immunize all children in the first five years of secondary school.

Usage

measles

ncvs

Format

Data frame with 11 variables. A parent who refused consent (variable 4) was asked why, with responses in variables 5-10. A parent could give more than one reason for not having the child immunized.

school school attended by child

form parent received consent form

returnf parent returned consent form

consent parent gave consent for measles immunization

hadmeas child had already had measles

previmm child had been immunized against measles

sideeff parent concerned about side effects

gp parent wanted GP (general practitioner) to give vaccine

noshot child did not want injection

notser parent thought measles not serious illness

gpadv GP advised that vaccine was not needed

Note

The original data were unavailable; univariate and multivariate summary statistics from these artificial data, however, are consistent with those in the paper.

Source

Roberts R. J. et al. (1995). Reasons for non-uptake of measles, mumps, and rubella catch up immunisation in a measles epidemic and side effects of the vaccine, *British Medical Journal*, 310, 1629–1632.

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 442.

ncvs

Victimization Incidents in the July-December 1989 NCVS

Description

Selected variables for victimization incidents in the July-December 1989 NCVS. Note that some variables were recoded from the original data file.

Usage

ncvs

nybight

Format

Data frame with the following seven variables:

wt incident weight

sex factor with levels male and female

violent violent crime? factor with levels no and yes

injury did the victim have injuries? factor with levels no and yes

medcare factor with levels yes if the victim received medical care and no otherwise

reppol was the incident reported to the police? factor with levels yes and no

Source

Incident-level concatenated file, NCS8864I, in NCJ-130915, U.S. Department of Justice 1991.

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 443.

nybight

Data Collected in the New York Bight

Description

Data collected in the New York Bight for June 1974 and June 1975 (Wilk et al. 1977)

Usage

nybight

Format

Data frame with the following 7 variables:

year year

stratum stratum membership, based on depth

catchnum number of fish caught during trawl

catchwt total weight (kg) of fish caught during trawl

numspp number of species of fish caught during trawl

depth depth of station (m)

temp surface temperature (degrees Celsius)

otters

Note

Two of the original strata were combined because of insufficient sample sizes.

Source

Wilk, S.J. et al. (1977). Fishes and associated environmental data collected in New York bight, June 1974 - June 1975. NOAA Technical Report NMFS SSRF-716. Washington, D.C: Government Printing Office.

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 443.

otters

Otters Data

Description

Data on number of holts (dens) in Shetland, United Kingdom used in Kruuk et al. (1989). (Data courtesy of Hans Kruuk).

Usage

otters

Format

Data frame with the following three variables:

section coastline section

habitat type of habitat (stratum)

holts number of holts

Source

Kruuk, H.A. et al. (1989). An estimate of numbers and habitat preferences of otters *Lutra lutra* in Shetland, UK., Biological Conservation, 49: 241–254.

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 443.

ozone

Description

Hourly ozone readings in parts per billion (ppb) from Eskdalemuir, Scotland, for 1994 and 1995

Usage

ozone

Format

Data frame with the following 25 variables:

date date (day/month/year) GMT1 ozone reading at 1:00 GMT GMT2 ozone reading at 2:00 GMT GMT3 ozone reading at 3:00 GMT GMT4 ozone reading at 4:00 GMT GMT5 ozone reading at 5:00 GMT GMT6 ozone reading at 6:00 GMT GMT7 ozone reading at 7:00 GMT GMT8 ozone reading at 8:00 GMT GMT9 ozone reading at 9:00 GMT GMT10 ozone reading at 10:00 GMT GMT11 ozone reading at 11:00 GMT GMT12 ozone reading at 12:00 GMT GMT13 ozone reading at 13:00 GMT GMT14 ozone reading at 14:00 GMT GMT15 ozone reading at 15:00 GMT GMT16 ozone reading at 16:00 GMT GMT17 ozone reading at 17:00 GMT GMT18 ozone reading at 18:00 GMT GMT19 ozone reading at 19:00 GMT GMT20 ozone reading at 20:00 GMT GMT21 ozone reading at 21:00 GMT GMT22 ozone reading at 22:00 GMT GMT23 ozone reading at 23:00 GMT GMT24 ozone reading at 24:00 GMT

samples

Source

Air Quality Information Centre: retrieved from a now defunct URL (http://www.aeat.co.uk)

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 443.

samples

Samples Dataset

Description

All possible SRSs that can be generated from the population in Example 2.1 of Lohr(1999).

Usage

samples

Format

Data frame with the following 10 variables:

snum sample number

- unit1 first unit in sample
- unit2 second unit in sample
- unit3 third unit in sample
- unit4 fourth unit in sample
- value1 value for first unit in sample
- value2 value for second unit in sample
- value3 value for third unit in sample
- value4 value for fourth unit in sample
- that t hat, i.e. estimate of the population total based on the given sample

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. 26-27 and 444.

seals

Description

Data on number of breathing holes found in sampled areas of Svalbard fjords, reconstructed from summary statistics given in Lydersen and Ryg (1991)

Usage

seals

Format

Data frame with the following 2 variables:

zone zone number for sampled area

holes number of breathing holes Imjak found in area

Note

The data are used in Chapter 4, Exercise 11.

Source

Lydersen, C. and Ryg, M. (1991). Evaluating breeding habitat and populations of ringed seals *Phoca hispida* in Svalbard fjords, *Polar Record*, 27: 223–228.

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 444.

selectrs

Steps used in Selecting an SRS

Description

Steps used in selecting the simple random sample (SRS) in Example 2.4 of Lohr(1999).

Usage

selectrs

statepop

Format

Data frame with the following 5 variables:

- a random number generated between 0 and 1
- **b** ceiling(3048*RN), with RN the random number in column a
- c distinct values in column b
- d new values generated to replace duplicates in b
- e final set of distinct values to be used in sample

Note

the set of indices in column e was used to select observations from agpop into dataset agsrs.

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. 31-34 and 444.

```
statepop
```

Unequal-Probability Sample of Counties in the US

Description

counties selected with probability proportional to 1992 population

Usage

statepop

Format

state state abbreviation
county county
landarea land area of country, 1990 (square miles)
popn population of county, 1992
phys number of physicians, 1990
farmpop farm population, 1990
numfarm number of farms, 1987
farmacre number of acres devoted to farming, 1987
veterans number of veterans, 1990
percviet percent of veterans from Vietnam era, 1990

Source

City and Counties Book, 1994

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. 190-192 and 444.

statepps Information on States

Description

Number of counties, land area, and population for the 50 states plus the District of Columbia

Usage

statepps

Format

Date frame with the following 7 variables:

state state name
counties number of counties in state
cumcount cumulative number of counties
landarea land area of state, 1990 (square miles)
cumland cumulative land area
popn population of state, 1992
cumpopn cumulative population

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 445.

syc

Survey of Youth in Custody, 1987

Description

The 1987 Survey of Youth in Custody sampled juveniles and young adults in long-term, stateoperated juvenile institutions. Residents of facilities at the end of 1987 were interviewed about family background, previous criminal history, and drug and alcohol use. Selected variables from the survey are contained in the syc data frame.

Usage

syc

syc

Format

stratum stratum number

psu psu (facility) number

psusize number of eligible residents in psu

initwt initial weight

finalwt final weight

randgrp random group number

age age of resident

race race of resident: factor with levels 1 (white), 2 (black), 3 (Asian/Pacific Islander), 4 (American Indian, Aleut, Eskimo), 5 (other)

ethnicty ethnicity; factor with levels hispanic and notHispanic

- educ highest grade before sent to correctional institution; factor with levels 0 (never attended), 1-12 (highest grade attended), 13 (GED), 14 (other)
- sex factor with levels male and female
- **livewith** factor with levels 1 (mother only), 2 (father only), 3 (both mother and father), 4 (grandparents), 5 (other relatives), 6 (friends), 7 (foster home), 8 (agency or institution), 9 (someone else)
- famtime Has anyone in your family, such as your mother, father, brother, sister, ever served time in jail or prison? factor with levels yes and no
- crimtype most serious crime in current offense; one of violent (e.g. murder, rape, robbery, assault), property (e.g. burglary, larceny, arson, fraud, motor vehicle theft), drug (drug possession or trafficking), publicorder (weapons violation, perjury, failure to appear in court), juvenile (juvenile-status offense, e.g. truancy, running away, incorrigible behavior)
- everviol Ever put on probation or sent to correctional institution for violent offense? factor with levels no and yes
- numarr number of times arrested (integer)

probtn number of times on probation

- corrinst number of times previously committed to correctional institution
- evertime Prior to being sent here, did you ever serve time in a correctional institution? factor with levels yes and no

prviol previously arrested for violent offense; factor with levels no and yes

prprop previously arrested for property offense; factor with levels no and yes

prdrug previously arrested for drug offense; factor with levels no and yes

prpub previously arrested for public-order offense; factor with levels no and yes

prjuv previously arrested for juvenile-status offense; factor with levels no and yes

agefirst age first arrested (integer)

usewepn Did you use a weapon... for this incident? factor with levels yes and no

alcuse Did you drink alcohol at all during the year before being sent here this time? factor with levels yes, noduringyear, noatall

everdrug Ever used illegal drugs? factor with levels no, yes

Source

Inter-University Consortium on Political and Social Research, NCJ-130915, U.S. Department of Justice 1989.

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. 235-239 and 445.

teachers

Elementary School Teacher Workload Data

Description

Selected variables from a study on elementary school teacher workload in Maricopa County, Arizona.

Usage

teachers

Format

data frame with the following 6 variables:

dist school district size; factor with levels large and me/sm (medium/small)

school school identifier

hrwork number of hours required to work at school per week

size class size

preprmin minutes spent per week in school on preparation

assist minutes per week that a teacher's aide works with the teacher in the classroom

Note

The study is described in Exercise 16 of Chapter 15. The psu sizes are given in teachmi. The large stratum had 245 schools; the small/medium stratum had 66 schools.

Source

Data courtesy of Rita Gnap (1995).

References

Gnap, R. (1995). Teacher load in Arizona elementary school districts in Maricopa County. Ph.D. diss., Arizona State University

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 446.

teachmi

Description

Cluster sizes for the study on elementary school teacher workload in Maricopa County, Arizona.

Usage

teachmi

Format

data frame with the following 6 variables:

dist school district size; factor with levels large and me/sm (medium/small)

school school identifier

popteach number of teachers in that school

ssteach number of surveys returned from that school

Note

The study is described in Exercise 16 of Chapter 15. The actual date are given in teachers.

Source

Data courtesy of Rita Gnap (1995).

References

Gnap, R. (1995). Teacher load in Arizona elementary school districts in Maricopa County. Ph.D. diss., Arizona State University

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 446.

teachnr

Follow-Up Study of Nonrespondents from Gnap (1995)

Description

Follow-up study of nonrespondents from the Gnap (1995) study on the workload of elementary school teachers in Maricopa County, Arizona.

Usage

teachnr

winter

Format

data frame with the following 6 variables:

hrwork number of hours required to work at school per week

size class size

preprmin minutes spent per week in school on preparation

assist minutes per week that a teacher's aide works with the teacher in the classroom

Note

The study is described in Exercise 16 of Chapter 15. The actual date are given in teachers. Cluster size data for the original study are given in teachmi.

Source

Data courtesy of Rita Gnap (1995).

References

Gnap, R. (1995). Teacher load in Arizona elementary school districts in Maricopa County. Ph.D. diss., Arizona State University

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 446.

winter

ASU Winter Closure Survey

Description

Selected variables from the Arizona State University Winter Closure Survey, taken in January 1995. This survey was taken to investigate the attitudes and opinions of university employees toward the closing of the university between December 25 and January 1.

Usage

winter

Format

data frame with the following 6 variables:

- **class** stratum number; factor with levels faculty, classstaff (classified staff), admstaff (administrative staff) and acprof (academic professional)
- yearasu factor with levels 1 (1-2 years), 2 (3-4 years), 3 (5-9 years), 4 (10-14 years) and 5 (15 or more years)
- vacation In the past, have you *usually* taken vacation days in the entire period between December 25 and January 1? factor with levels no and yes

- work Did you work on campus during Winter Break Closure? factor with levels no and yes
- havediff Did the Winter Break Closure cause you any difficulty/concerns? factor with levels no and yes
- **negaeffe** Did the Winter Break Closure *negatively* affect your work productivity? factor with levels no and yes
- **ownsupp** I was unable to obtain staff support in my department/office. factor with levels yes and no
- othersup I was unable to obtain staff support in other departments/offices. factor with levels yes and no
- **utility** I was unable to access computers, copy machine, etc. in my department/office. factor with levels yes and no
- **environ** I was unable to endure environmental conditions e.g., not properly climatized. factor with levels yes and no
- uniserve I was unable to access university services necessary to my work; factor with levels yes and no
- **workelse** I was unable to work on my assignments because I work in another department/office; factor with levels yes and no
- offclose I was unable to work on my assignments because my office was closed; factor with levels yes and no
- **treatsta** compared to other departments/offices, I feel staff in my department/office were treated fairly; factor with levels strongagr (strongly agree), agree, undecided, disagree, strdisagr (strongly disagree)
- **treatme** compared to other people working in my department/office, I feel I was treated fairly; factor with levels strongagr (strongly agree), agree, undecided, disagree, strdisagr (strongly disagree)
- process How satisfied are you with the process used to inform staff about Winter Closure? factor with levels verysat (very satisfied), satisfied, undecided, dissatisfied and verydissat (very dissatisfied)
- satbreak How satisfied are you with the fact that ASU had a Winter Break Closure this year? factor with levels verysat (very satisfied), satisfied, undecided, dissatisfied and verydissat (very dissatisfied)
- breakaga Would you want to have Winter Break Closure again? factor with levels no and yes

Source

courtesy of the ASU Office of University Evaluation.

References

Lohr (1999). Sampling: Design and Analysis, Duxbury, p. TODO and 447-448.

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