## LoFNI DND DOMQ ${ }^{[1]}$

July 16, 2020
Title Dataset documentaton for the third edition of `"Statistics: UnLocking the Power of Data"
\$XMFU/ILock, Lock, Lock Morgan, lock, and Lock
3XE®KHUllWiley (2020)
Documentation for these datasets has been generated from the manual for the Lock5Data package.
The package itself also includes versions of some fo the datasets for the first and second editions.

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ACS
American Community Survey

## Description

Data from a sample of individuals in the American Community Survey

## Format

A data frame with 2000 observations on the following 9 variables.
Sex $0=$ female and $1=$ male
Age Age (years)
Married $0=$ not married and $1=$ married
Income Wages and salary for the past 12 months (in $\$ 1,000$ 's)
HoursWk Hours of work per week
Race asian, black, other, or white
USCitizen $1=$ citizen and $0=$ noncitizen
HealthInsurance $1=$ have health insurance and $0=$ no health insurance
Language $1=$ English spoken at home and $0=$ other

## Details

The American Community Survey, administered by the US Census Bureau, is given every year to a random sample of about 3.5 million households (about $3 \%$ of all US households). Data on a random sample of $1 \%$ of all US residents are made public (after ensuring anonymity), and we have selected a random sub-sample of $\mathrm{n}=2000$ from the 2017 data for this dataset.
** Updated for 3e (ealier verson is ACS2010). **

## Source

The full public dataset can be downloaded at http://www.census.gov/acs/www/datadocumentation/ pumsdata/, and the full list of variables are at https://www.census.gov/programs-surveys/ acs/data/pums.html

## All Countries

## Description

Data on the countries of the world

## Format

A data frame with 217 observations on the following 26 variables.
Country Country name
Code Three-letter code for country
LandArea Size in 1000 sq. km.
Population Population in millions
Density Number of people per square kilometer
GDP Gross Domestic Product (in \$US) per capita
Rural Percentage of population living in rural areas
C02 CO2 emissions (metric tons per capita)
PumpPrice Price for a liter of gasoline (\$US)
Military Percentage of government expenditures directed toward the military
Health Percentage of government expenditures directed towards healthcare
ArmedForces Number of active duty military personnel (in 1,000 's)
Internet Percentage of the population with access to the internet
Cell Cell phone subscriptions (per 100 people)
HIV Percentage of the population with HIV
Hunger Percent of the population considered undernourished
Diabetes Percent of the population diagnosed with diabetes
BirthRate Births per 1000 people
DeathRate Deaths per 1000 people
ElderlyPop Percentage of the population at least 65 years old
LifeExpectancy Average life expectancy (years)
FemaleLabor Percent of females 15-64 in the labor force
Unemployment Percent of labor force unemployed
Energy Kilotons of oil equivalent
Electricity Electric power consumption (kWh per capita)
Developed Categories for kilowatt hours per capita, $1=$ under 2500, $2=2500$ to $5000,3=$ over 5000

## Details

Data for each variable were collected for 2018 (or most recently available year). Within a variable all country measurements are from the same year, but the year may vary betwen different variables depending on availabilty.
** This dataset is updated from an earlier versions (now Allcountries1e and AllCountries2e) **

## Source

The data were gathered online from data. worldbank. org. Accessed June 2019.

## APMultipleChoice AP Multiple Choice

## Description

Correct responses on Advanced Placement multiple choice exams

## Format

A dataset with 400 observations on the following variable.
Answer Correct response: A, B, C, D, or E

## Details

Correct responses from multiple choice sections for a sample of released Advanced Placement exams

## Source

Sample exams from several disciplines at http://apcentral.collegeboard.com

## April14Temps April 14th Temperatures

## Description

Temperatures in Des Moines, IA and San Francisco, CA on April 14th

## Format

A data frame with 25 observations on the following 3 variables.
Year 1995 to 2019
DesMoines Temperature in Des Moines (degrees F)
SanFrancisco Temperature in San Francisco (degrees F)

## Details

Average temperature for the day of April 14th in each of 25 years from 1995-2019
** Data set updated for 3 e (earlier versions are now April14Temps1e and April14Temps2e) **

## Source

The University of Dayton Average Daily Temperature Archive at http://academic.udayton. edu/kissock/http/Weather/citylistUS.htm

## Description

Number of hits, wins, and other stats for MLB teams in 2019

## Format

A data frame with 30 observations on the following 14 variables.

Team Name of baseball team (3-character code)
League Either AL or NL
Wins Number of wins for the season
Runs Number of runs scored
Hits Number of hits
Doubles Number of doubles
Triples Number of triples
HomeRuns Number of home runs
RBI Number of runs batted in
StolenBases Number of stolen bases
CaughtStealing Number of times caught stealing
Walks Number of walks
Strikeouts Number of stikeouts
BattingAvg Team batting average

## Details

Offensive team statistics for the 2019 Major League Baseball regular season.
** Updated for 3e (earlier versions are now BaseballHits2014 and BaseballHits1e)

## Source

http://www.baseball-reference.com/leagues/MLB/2019-standard-batting.shtml

## Description

Opening Day salaries for all Major League Baseball players in 2019

## Format

A data frame with 877 observations on the following 4 variables.
Name Player's name
Salary 2019 season salary (in millions)
Team Abbreviated team name
POS Code for player's main position

## Details

Yearly salary (in millions of dollars) for all players on the rosters of Major League Baseball teams at the start of the 2019 season.
** Updated for 3 e (ealier version for 2015 is at BaseballSalaries2015).

## Source

http://www.usatoday.com/sports/mlb/salaries

## BaseballTimes Baseball Game Times

## Description

Information for a sample of 30 Major League Baseball games played during the 2011 season

## Format

A dataset with 30 observations on the following 9 variables.

| Away | Away team name |
| ---: | :--- |
| Home | Home team name |
| Runs | Total runs scored (both teams) |
| Margin | Margin of victory |
| Hits | Total number of hits (both teams) |
| Errors | Total number of errors (both teams) |
| Pitchers | Total number of pitchers used (both teams) |
| Walks | Total number of walks (both teams) |
| Time | Elapsed time for game (in minutes) |

## Details

Data from a sample of boxscores for Major League Baseball games played in August 2011.

## Source

http://www.baseball-reference.com/boxes/2011.shtml

## Benford Benford data

## Description

Two examples to test Benford's Law

## Format

A dataset with 9 observations on the following 4 variables.
Digit Leading digit (1-9)
BenfordP Expected proportion according to Benford's law
Address Frequency as a first digit in an address
Invoices Frequency as the first digit in invoice amounts

## Details

Leading digits from 1188 addresses sampled from a phone book and 7273 amounts from invoices sampled at a company.

## Source

Thanks to Prof. Richard Cleary for providing the data

## BikeCommute <br> Bike Commute

## Description

Commute times for two kinds of bicycle

## Format

A dataset with 56 observations on the following 9 variables.
Bike Type of material Carbon or Steel
Date Date of the bike commute
Distance Length of commute (in miles)
Time Total commute time (hours:minutes:seconds)
Minutes Time converted to minutes

| AvgSpeed | Average speed during the ride (miles per hour) |
| ---: | :--- |
| TopSpeed | Maximum speed (miles per hour) |
| Seconds | Time converted to seconds |
| Month | Categories: 1Jan 2Feb 3Mar 4Apr 5May 6June 7July |

## Details

Data from a personal experiment to compare commuting time based on a randomized selection between two bicycles made of different materials.

## Source

Thanks to Dr. Groves for providing his data.

## References

Bicycle weight and commuting time: randomised trial, in British Medical Journal, BMJ 2010;341:c6801.

## BodyFat Body Measurements

## Description

Percent fat and other body measurements for a sample of men

## Format

A dataset with 100 observations on the following 10 variables.

| Bodyfat | Percent body fat |
| ---: | :--- |
| Age | Age in years |
| Weight | Weight in pounds |
| Height | Height in inches |
| Neck | Neck circumference in cm. |
| Chest | Chest circumference in cm. |
| Abdomen | Abdomen cirumference in cm. |
| Ankle | Ankle circumference in cm. |
| Biceps | Exended biceps circumference in cm. |
| Wrist | Wrist circumference in cm. |

## Details

This is a subset of a larger sample of men who each had a percent body fat estimated by an underwater weighing technique. Other measurements were taken to see how they might be used to predict the body fat percentage.

## Source

These data were contributed by Roger Johnson, then at Carleton University, to the Datasets Archive at the Journal of Statistics Education.
https://ww2.amstat.org/publications/jse/v4n1/datasets.johnson.html

The data were originally supplied by Dr. A. Garth Fisher, Human Performance Research Center, Brigham Young University, Provo, Utah 84602.

```
BodyTemp50 Body Temperatures
```


## Description

Sample of 50 body temperatures

## Format

A data frame with 50 observations on the following 3 variables.
BodyTemp Body temperature in degrees F
Pulse Pulse rates (beat per minute)
Sex $\mathrm{F}=$ Female, $\mathrm{M}=$ Male

## Details

Body temperatures and pulse rates for a sample of 50 healthy adults. Note the Sex variable was labeled as Gender in earlier versions of this dataset. We acknowledge that this binary dichotomization is not a complete or inclusive representation of reality.

## Source

Shoemaker, "What's Normal: Temperature, Gender and Heartrate", Journal of Statistics Education, Vol. 4, No. 2 (1996)
http://jse.amstat.org/v4n2/datasets.shoemaker.html

## BootAtlantaCorr Bootstrap Correlations for Atlanta Commutes

## Description

Bootstrap correlations between Time and Distance for 500 commuters in Atlanta

## Format

A dataset with 1000 observations on the following variable.
CorrTimeDist Correlation between Time and Distance for a bootstrap sample of Atlanta commuters

## Details

Correlations for bootstrap samples of Time vs. Distance for the data on Atlanta commuters in CommuteAtlanta.

## Source

Computer simulation

CaffeineTaps Caffeine Taps

## Description

Finger tap rates with and without caffeine

## Format

A dataset with 20 observations on the following 2 variables.

$$
\begin{aligned}
\text { Taps } & \text { Number of finger taps in one minute } \\
\text { Group } & \text { Treatment with levels Caffeine NoCaffeine }
\end{aligned}
$$

## Details

Results from a double-blind experiment where a sample of male college students were asked to tap their fingers at a rapid rate. The sample was then divided at random into two groups of ten students each. Each student drank the equivalent of about two cups of coffee, which included about 200 mg of caffeine for the students in one group but was decaffeinated coffee for the second group. After a two hour period, each student was tested to measure finger tapping rate (taps per minute). The goal of the experiment was to determine whether caffeine produces an increase in the average tap rate.

## Source

Hand, Daly, Lund, McConway and Ostrowski, Handbook of Small Data Sets, Chapman and Hall, London (1994), pp. 40

```
CAOSExam CAOS Exam Scores
```


## Description

Scores on a pre-test and post-test of basic statistics concepts

## Format

A dataset with 10 observations on the following 3 variables.

| Student | ID code for student |
| ---: | :--- |
| Pretest | CAOS Pretest score |
| Posttest | CAOS Posttest score |

## Details

The CAOS (Comprehensive Assessment of Outcomes in First Statistics Course) exam is designed to measure comprehension of basic statistical ideas in an introductory statistics course. This dataset has scores for ten students who took the CAOS pre-test at the start of a course and the post-test during the course itself. Each exam consists of 40 multiple choice questions and the score is the percentage correct.

## Source

A sample of 10 students from an introductory statisics course. Find out more about the CAOS exam at http://app.gen.umn.edu/artist/caos.html

```
CarbonDioxide Carbon Dioxide Levels
```


## Description

Atmospheric carbon dioxide levels by year

## Format

A data frame with 12 observations on the following 2 variables.
Year Every five years from 1960 to 2015
C02 Carbon dioxide level in parts per million

## Details

Carbon dioxide levels in the atmosphere over a 55 year span from 1960-2015.
** Updated for 3 e (earler version is now CarbonDioxide2e) **

## Source

Dr. Pieter Tans, NOAA/ESRL. Values recorded at the Mauna Loa Observatory in Hawaii. www. esrl.noaa.gov/gmd/ccgg/trends/

## CarDepreciation Car Depreciation

## Description

Depreciation for 20 car models.

## Format

A dataset with 20 observations on the following 4 variables.

| Car | Name of the car model |
| ---: | :--- |
| New | Price of a new car |
| Used | Value after new car leaves the lot after purchase |
| Depreciation | Drop in value when a new car is driven away |

## Details

Twenty car models were selected at random from kellybluebook.com. Original price (in dollars) and value after the car has been driven 10 miles were recorded for each model. The depreciation is the difference (New-Used).

## Source

New and used automobile costs determined using 2015 models selected from kellybluebook.com.

## Cars2020 2020 Car Models

## Description

Information about new car models in 2020

## Format

A data frame with 110 observations on the following 21 variables.
Make Manufacturer (e.g. Chevrolet, Toyota, etc.)
Model Car model (e.g. Impala, Highlander, ...)
Type Vehicle category (Hatchback, Minivan, Sedan, Sporty, SUV, or Wagon)
LowPrice Lowest MSRP (in $\$ 1,000$ )
HighPrice Highest MSRP (in $\$ 1,000$ )
CityMPG City miles per gallon (EPA)
HwyMPG Highway miles per gallon (EPA)
Seating Seating capacity
Drive Type of drive (AWD, FWD, or RWD)
Acc030 Time (in seconds) to go from 0 to 30 mph
Acc060 Time (in seconds) to go from 0 to 60 mph
QtrMile Time (in seconds) to go $1 / 4$ mile
Braking Distance to stop from 60 mph (dry pavement)
FuelCap Fuel capacity (in gallons)
Length Length (in inches)
Width Width (in inches)
Height Height (in inches)
Wheelbase Wheelbase (in inches)
UTurn Diameter (in feet) needed for a U-turn
Weight Curb weight (in pounds)
Size Large, Midsized, or Small

## Details

Data for a set of 110 new car models in 2020 based on information in the Consumer Reports.
** Updated for 3e (an earler version from 2015 is at Cars2015). **

## Source

Data on new car models in 2020 accessed from Consumer Reports website. https: //www. consumerreports. org/cars/

## Cereal Breakfast Cereals

## Description

Nutrition information for a sample of 30 breakfast cereals

## Format

A dataset with 30 observations on the following 10 variables.

| Name | Brand name of cereal |
| ---: | :--- |
| Company | Manufacturer coded as G=General Mills, K=Kellog's or Q=Quaker |
| Serving | Serving size (in cups) |
| Calories | Calories (per cup) |
| Fat | Fat (grams per cup) |
| Sodium | Sodium (mg per cup) |
| Carbs | Carbohydrates (grams per cup) |
| Fiber | Dietary Fiber (grams per cup) |
| Sugars | Sugars (grams per cup) |
| Protein | Protein (grams per cup) |

## Details

Nutrition contents for a sample of breakfast cereals, derived from nutrition labels. Values are per cup of cereal (rather than per serving).

## Source

Cereal data obtained from nutrition labels at
http://www.nutritionresource.com/foodcomp2.cfm?id=0800

## CityTemps City Temperatures

## Description

Mean monthly temperature in Moscow, Melbourne, and San Francisco for 2017 and 2018

## Format

A data frame with 24 observations on the following 5 variables.
Year 2017 or 2018

Month 1=January through 12=December
Moscow Monthly temperatures in Moscow (Russia)
Melbourne Monthly temperatures in Melbourne (Australia)
San. Francisco Monthly temperatures in San Francisco (United States)

## Details

Mean monthly temperatures in degrees C for the years 2017 and 2018 in each of three cities.
** Updated for 3 e (an earlier version for 2014 and 2015 is at CityTemps2e). **

## Source

Source: KNMI Climate Explorer at https://climexp.knmi.nl/selectstation.cgi?id=someone@ somewhere Use station codes 94866 (Melbourne), 72494 (San Francisco), 27612 (Moscow).

## CocaineTreatment Cocaine Treatment

## Description

Relapse/no relapse responses to three different treatments for cocaine addiction

## Format

A dataset with 72 observations on the following 2 variables.
$\begin{aligned} \text { Drug } & \text { Treatment drug: Desipramine, Lithium, or Placebo } \\ \text { Relapse } & \text { Did the patient relapse? no or yes }\end{aligned}$

## Details

Data from an experiment to investigate the effectiveness of the two drugs, desipramine and lithium, in the treatment of cocaine addiction. Subjects (cocaine addicts seeking treatment) were randomly assigned to take one of the treatment drugs or a placebo. The response variable is whether or not the subject relapsed (went back to using cocaine) after the treatment.

## Source

Gawin, F., et.al., "Desipramine Facilitation of Initial Cocaine Abstinence", Archives of General Psychiatry, 1989; 46(2): 117-121.

## ColaCalcium <br> Cola Calcium

## Description

Calcium excretion with diet cola and water

## Format

A dataset with 16 observations on the following 2 variables.

$$
\begin{aligned}
\text { Drink } & \text { Type of drink: Diet cola or Water } \\
\text { Calcium } & \text { Amount of calcium excreted (in mg.) }
\end{aligned}
$$

## Details

A sample of 16 healthy women aged 18-40 were randomly assigned to drink 24 ounces of either diet cola or water. Their urine was collected for three hours after ingestion of the beverage and calcium excretion (in mg.) was measured. The researchers were investigating whether diet cola leaches calcium out of the system, which would increase the amount of calcium in the urine for diet cola drinkers.

## Source

Larson, Amin, Olsen, and Poth, Effect of Diet Cola on Urine Calcium Excretion, Endocrine Reviews, 31[3]: S1070, June 2010. These data are recreated from the published summary statistics, and are estimates of the actual data.

```
CollegeScores
College Scorecard
```


## Description

Information on all US post-secondary schools collected by the Department of Education for the College Scorecard

## Format

A data frame with 6141 observations on the following 37 variables.
Name Name of the school
State State where school is located
ID ID number for school
Main Main campus? ( $1=$ yes, $0=$ branch campus)
Accred Accreditation agency
MainDegree Predominant undergrad degree ( $0=$ not classified, $1=$ certificate, $2=$ associate, $3=$ bachelors, $4=$ only graduate)

HighDegree Highest degree ( $0=$ no degrees, $1=$ certificate, $2=$ associate, $3=$ bachelors, $4=$ graduate $)$
Control Control of school (Private, Profit, Public)
Region Region of country (Midwest, Northeast, Southeast, Territory, West)
Locale Locale (City, Rural, Suburb, Town)
Latitude Latitude
Longitude Longitude
AdmitRate Admission rate

```
MidACT Median of ACT scores
AvgSAT Average combined SAT scores
Online Only online (distance) programs
Enrollment Undergraduate enrollment
White Percent of undergraduates who report being white
Black Percent of undergraduates who report being black
Hispanic Percent of undergraduates who report being Hispanic
Asian Percent of undergraduates who report being Asian
Other Percent of undergraduates who don't report one of the above
PartTime Percent of undergraduates who are part-time students
NetPrice Average net price (cost minus aid)
Cost Average total cost for tuition, room, board, etc.
TuitionIn In-state tuition and fees
TuitonOut Out-of-state tuition and fees
TuitionFTE Net Tuition revenue per FTE student
InstructFTE Instructional spending per FTE student
FacSalary Average monthly salary for full-time faculty
FullTimeFac Percent of faculty that are full-time
Pell Percent of students receiving Pell grants
CompRate Completion rate (percent who finish program within 150% of normal time)
Debt Average debt for students who complete program
Female Percent of female students
FirstGen Percent of first-generation students
MedIncome Median family income (in $1,000)
```


## Details

The US Department of Education maintains a database through its College Scorecard project of demographic information from all active postsecondary educational institutions that participate in Title IV. This dataset contains a small subsets of the variables in the full College Scorecard.

## Source

Data downloaded from the US Department of Education's College Scorecard at https: //collegescorecard. ed.gov/data/ (November 2019)

## Description

Information on all US colleges and universities that primarily grant associate's degrees, collected by the Department of Education for the College Scoreboard.

## Format

A data frame with 1141 observations on the following 37 variables.
Name Name of the school
State State where school is located
ID ID number for school
Main Main campus? ( $1=$ yes, $0=$ branch campus)
Accred Accreditation agency
MainDegree Predominant undergrad degree ( $2=$ associate)
HighDegree Highest degree ( $0=$ no degrees, $1=$ certificate, $2=$ associate, $3=$ bachelors, $4=$ graduate )
Control Control of school (Private, Profit, Public)
Region Region of country (Midwest, Northeast, Southeast, Territory, West)
Locale Locale (City, Rural, Suburb, Town)
Latitude Latitude
Longitude Longitude
AdmitRate Admission rate
MidACT Median of ACT scores
AvgSAT Average combined SAT scores
Online Only online (distance) programs
Enrollment Undergraduate enrollment
White Percent of undergraduates who report being white
Black Percent of undergraduates who report being black
Hispanic Percent of undergraduates who report being Hispanic
Asian Percent of undergraduates who report being Asian
Other Percent of undergraduates who don't report one of the above
PartTime Percent of undergraduates who are part-time students
NetPrice Average net price (cost minus aid)
Cost Average total cost for tuition, room, board, etc.
TuitionIn In-state tuition and fees
TuitonOut Out-of-state tuition and fees
TuitionFTE Net Tuition revenue per FTE student
InstructFTE Instructional spending per FTE student
FacSalary Average monthly salary for full-time faculty

FullTimeFac Percent of faculty that are full-time
Pell Percent of students receiving Pell grants
CompRate Completion rate (percent who finish program within $150 \%$ of normal time)
Debt Average debt for students who complete program
Female Percent of female students
FirstGen Percent of first-generation students
MedIncome Median family income (in $\$ 1,000$ )

## Details

The US Department of Education maintains a database through its College Scorecard project of demographic information from all active postsecondary educational institutions that participate in Title IV. This dataset contains a small subset of the variables in the full College Scorecard and only the schools that primarily grant associate's degrees (MainDegree=2). The CollegeScores dataset contains these and other schools with other degree types.

## Source

Data downloaded from the US Department of Education's College Scorecard at https://collegescorecard. ed.gov/data/ (November 2019)

CollegeScores4yr College Scorecard - Four Year

## Description

Information on all US colleges and universities that primarily grant bachelor's degrees, collected by the Department of Education for the College Scoreboard

## Format

A data frame with 2012 observations on the following 37 variables.
Name Name of the school
State State where school is located
ID ID number for school
Main Main campus? ( $1=y e s, 0=$ branch campus)
Accred Accreditation agency
MainDegree Predominant undergrad degree (3=bachelors)
HighDegree Highest degree ( $0=$ no degrees, $1=$ certificate, $2=$ associate, $3=$ bachelors, $4=$ graduate $)$
Control Control of school (Private, Profit, Public)
Region Region of country (Midwest, Northeast, Southeast, Territory, West)
Locale Locale (City, Rural, Suburb, Town)
Latitude Latitude
Longitude Longitude
AdmitRate Admission rate

MidACT Median of ACT scores
AvgSAT Average combined SAT scores
Online Only online (distance) programs
Enrollment Undergraduate enrollment
White Percent of undergraduates who report being white
Black Percent of undergraduates who report being black
Hispanic Percent of undergraduates who report being Hispanic
Asian Percent of undergraduates who report being Asian
Other Percent of undergraduates who don't report one of the above
PartTime Percent of undergraduates who are part-time students
NetPrice Average net price (cost minus aid)
Cost Average total cost for tuition, room, board, etc.
TuitionIn In-state tuition and fees
TuitonOut Out-of-state tuition and fees
TuitionFTE Net Tuition revenue per FTE student
InstructFTE Instructional spending per FTE student
FacSalary Average monthly salary for full-time faculty
FullTimeFac Percent of faculty that are full-time
Pell Percent of students receiving Pell grants
CompRate Completion rate (percent who finish program within $150 \%$ of normal time)
Debt Average debt for students who complete program
Female Percent of female students
FirstGen Percent of first-generation students
MedIncome Median family income (in $\$ 1,000$ )

## Details

The US Department of Education maintains a database through its College Scorecard project of demographic information from all active postsecondary educational institutions that participate in Title IV. This dataset contains a small subset of the variables in the full College Scorecard and only the schools that primarily grant bachelor's degrees (MainDegree=3). The CollegeScores dataset contains these and other schools with other degree types.

## Source

Data downloaded from the US Department of Education's College Scorecard at https://collegescorecard. ed.gov/data/ (November 2019)

CommuteAtlanta Commute Atlanta

## Description

Commute times and distances for a sample of 500 people in Atlanta

## Format

A data frame with 500 observations on the following 5 variables.

| City | Atlanta |
| ---: | :--- |
| Age | Age of the respondent (in years) |
| Distance | Commute distance (in miles) |
| Time | Commute time (in minutes) |
| Sex | F or M |

## Details

Data from the US Census Bureau's American Housing Survey (AHS) which contains information about housing and living conditions for samples from certain metropolitan areas. These data were extracted from respondents in the Atlanta metropolitan area. They include only cases where the respondent worked somewhere other than home. Values show the time (in minutes) and distance (in miles) that respondents typically traveled on their commute to work each day as well as age and sex.

## Source

Sample chosen using DataFerret at http://www.thedataweb.org/index.html.

CommuteStLouis Commute Times in St. Louis

## Description

Commute times and distances for a sample of 500 people in St. Louis

## Format

A dataset with 500 observations on the following 5 variables.

| City | St. Louis |
| ---: | :--- |
| Age | Age of the respondent (in years) |
| Distance | Commute distance (in miles) |
| Time | Commute time (in minutes) |
| Sex | F or M |

## Details

Data from the US Census Bureau's American Housing Survey (AHS) which contains information about housing and living conditions for samples from certain metropolitan areas. These data were extracted from espondents in the St. Louis metropolitan area. They include only cases where the respondent worked somewhere other than home. Values show the time (in minutes) and distance (in miles) that respondents typically traveled on their commute to work each day as well as age and sex.

## Source

Sample chosen using DataFerret at http://www.thedataweb.org/index.html.

## CompassionateRats Compassionate Rats

## Description

Would a rat attempt to free a trapped rat?

## Format

A dataset with 30 observations on the following 2 variables.
Sex Sex of the rat: coded as F or M
Empathy Freed the trapped rat? no or yes

## Details

In a recent study, some rats showed compassion by freeing another trapped rat, even when chocolate served as a distraction and even when the rats would then have to share the chocolate with their freed companion.

## Source

Bartal I.B., Decety J., and Mason P., "Empathy and Pro-Social Behavior in Rats," Science, 2011; 224(6061):1427-1430.

## Description

Cricket chirp rate and temperature

## Format

A dataset with 7 observations on the following 2 variables.

$$
\begin{aligned}
\text { Temperature } & \text { Air temperature in degrees } \mathrm{F} \\
\text { Chirps } & \text { Cricket chirp rate (chirps per minute) }
\end{aligned}
$$

## Details

The data were collected by E.A. Bessey and C.A. Bessey who measured chirp rates for crickets and temperatures during the summer of 1898.

## Source

From E.A Bessey and C.A Bessey, Further Notes on Thermometer Crickets, American Naturalist, (1898) 32, 263-264.

## Description

Funding for individuals by the California Department of Developmental Services (DDS),

## Format

A dataset with 1000 observations on the following 6 variables.

| ID | ID code for subject |
| ---: | :--- |
| AgeCohort | Age group (0-5, 6-12, 13-17, 18-21, 22-50, 50+) |
| Age | Age in years |
| Expenditures | Annual expenditures in dollars |
| Ethnicity | Ethnic group |

## Details

The California Department of Developmental Services (DDS) allocates funds to support developmentally disabled California residents (such as those with autism, cerebral palsy, or intellectual disabilities) and their families. We refer to those supported by DDS as DDS consumers. The dataset DDS includes data on annual expenditure (in \$), ethnicity, age, and gender for 1000 DDS consumers.

## Source

Taylor, S.A. and Mickel, A. E. (2014). "Simpson's Paradox: A Data Set and Discrimination Case Study Exercise," Journal of Statistics Education, 22(1). The dataset has been altered slightly for privacy reasons, but is based on actual DDS consumers.

```
DecemberFlights December Flights
```


## Description

Difference between actual and scheduled arrival for United and Delta flights in December 2018.

## Format

A data frame with 2000 observations on the following 2 variables.
Airline Delta or United
Difference Actual - Scheduled arrival times (in minutes)

## Details

For a sample of 1000 December flights (in 2018) from each airline, we find the difference between actual and scheduled arrival times. A negative value indicates the flight arrived early. ** Updated for 3e (earlier version from 2014 is in DecemberFlights2e.)

## Source

Downloaded from the Bureau of Transportation Statistics (https://www.bts.gov/). More specific URL is https://www.transtats.bts.gov/DL_SelectFields.asp?Table_ID=236\&DB_Short_ Name=On-Time

## DietDepression Diet and Depression

## Description

Results from a study of a short-term diet intervention on depression.

## Format

A data frame with 75 observations on the following 10 variables.
Group Control or Diet
CESD1 CESD depression score on Day 1
CESD21 CESD depression score on Day 21
CESDDiff Change in CESD depression score
DASS1 DASS depression score on Day 1
DASS21 DASS depression score on Day 21
DASSDiff Change in DASS depression score
BMI1 Body Mass Index on Day 1
BMI21 Body Mass Index on Day 21
BMIDiff Change in Body Mass Index

## Details

A group of researchers in Australia conducted a short (three-week) dietary intervention in a randomized controlled experiment. In the study, 75 college-age students with elevated depression symptoms and relatively poor diet habits were randomly assigned to either a healthy diet intervention group or a control group. The researchers recorded the change over the three-week period on two different numeric scales of depression (the CESD scale and the DASS scale). The CESD (Centre for Epidemiological Studies Depression) score is based more on clinical observations, while the DASS (Depression, Anxiety, and Stress Scale) depends more on self-reported information. They also recorded body mass index (BMI) at the start and end of the 21 day period.

## Source

Francis HM, et al., "A brief diet intervention can reduce symptoms of depression in young adults A randomised controlled trial," PLoS ONE, 14(10), October 2019.

## Digits Digit Counts

## Description

Digits from social security numbers and student selected "random numbers"

## Format

A dataset with 150 observations on the following 7 variables.

| Random | Four digit random numbers given by a sample of students |
| ---: | :--- |
| RND1 | First digit |
| RND2 | Second digit |
| RND3 | Third digit |
| RND4 | Fourth digit |
| SSN8 | Eighth digit of social security number |
| SSN9 | Last digit of social security number |

## Details

A sample of students were asked to give a random four digit number. The numbers are given in the dataset, along with separate columns for each of the four digits. The data also show the last two digits of each student's social security number (SSN).

## Source

In-class student surveys from several classes.

## DogOwner Dog/Owner matches

## Description

Experiment to match dogs with owners

## Format

A dataset with 25 observations on the following variable.
Match Was the dog correctly paired with it's owner? no or yes

## Details

Pictures were taken of 25 owners and their purebred dogs, selected from dog parks. Study participants were shown a picture of an owner together with pictures of two dogs (the owner's dog and another random dog from the study) and asked to choose which dog most resembled the owner.

Each dog-owner pair was viewed by 28 naive undergraduate judges, and the pairing was deemed "correct" (yes) if the majority of judges (more than 14) chose the correct dog to go with the owner.
** In first edition, but not as dataset in $2 \mathrm{e}^{* *}$

## Source

Roy and Christenfeld, Do Dogs Resemble their Owners?, Psychological Science, Vol. 15, No. 5, 2004, pp. 361-363.

```
DrugResistance Drug Resistance
```


## Description

Effect on drug resistance by level of treatment in mice.

## Format

A dataset with 72 observations on the following 5 variables.

$$
\begin{aligned}
\text { Treatment } & \text { Untreated, Light, Moderate, or Aggressive } \\
\text { Weight } & \text { Mouse weight in grams } \\
\text { RBC } & \text { Red blood cell density } \\
\text { ResistantDensity } & \text { Density of resistant parasites } \\
\text { DaysInfectious } & \text { Days infectious with resistant parasites }
\end{aligned}
$$

## Details

In an experiment to study drug resistance in mice, groups of 18 mice were injected with a mixture of drug-resistant and drug-susceptible malaria parasites. One group received no treatment while the others got limited, moderate, or aggressive amounts of anti-malarial treatment. The weight and red blood cell density reflect the initial health of the mice. Density of resistant parasites and number of days infectious measure the effectiveness of the treatment.

## Source

Huijben S, Bell AS, Sim DG, Tomasello D, Mideo N, Day T, Read AF (2013) Aggressive chemotherapy and the selection of drug resistant pathogens. PLoS Pathogens 9(9): e1003578.
http://dx.doi.org/10.1371/journal.ppat. 1003578
Huijben S, et al., (2013). Data from: Aggressive chemotherapy and the selection of drug resistant pathogens. Dryad Digital
Repository. http://dx.doi.org/10.5061/dryad.09qc0

EducationLiteracy Education and Literacy

## Description

Education spending and literacy rates for countries.

## Format

A data frame with 170 observations on the following 4 variables.
Country Name of country
Code Three-letter code for country
Education Education spending (as a percentage of GDP)
Literacy Literacy rate

## Details

For each country, we have public spending on education (as a percentage of GDP) and literacy rate (percentage of the population who can read and write).
** Updated for 3e (an earlier version is at EducationLiteracy2e). **

## Source

Most recent data (as of 2019) for each country obtained from worldbank.org.

## ElectionMargin Election Margin

## Description

Approval rating and election margin for recent presidential elections

## Format

A dataset with 12 observations on the following 5 variables.

| Year | Certain election years from 1940-2012 |
| ---: | :--- |
| Candidate | Incumbent US president |
| Approval | Presidential approval rating at time of election |
| Margin | Margin of victory/defeat (as a percentage) |
| Result | Outcome of the election for the incumbent: Lost or Won |

## Details

Data include US Presidential elections since 1940 in which an incumbent was running for president. The approval rating for the sitting president is compared to the margin of victory/defeat in the election.
** Updated for 2 e (original is now ElectionMargin1e) **

## Source

Silver, Nate, "Approval Ratings and Re-Election Odds", fivethirtyeight.com, posted January 28, 2011 and http:\realclearpolitics.org

EmployedACS Employed in American Community Survey

## Description

Employed individuals from the American Community Survey (ACS) dataset

## Format

A data frame with 1287 observations on the following 9 variables.

Sex $0=$ female and $1=$ male
Age Age (years)
Married $0=$ not married and $1=$ married
Income Wages and salary for the past 12 months (in $\$ 1,000$ 's)
HoursWk Hours of work per week
Race asian, black, other, white
USCitizen $1=$ citizen and $0=$ noncitizen
HealthInsurance $1=$ have health insurance and $0=$ no health insurance
Language 1=native English speaker and 0=other

## Details

This is a subset of the ACS dataset including only 1287 individuals who were employed. (HoursWk>0)
** Updated for 3e (an earlier version is at EmployedACS2010).

## Source

The full public dataset can be downloaded at http://www.census.gov/acs/www/datadocumentation/ pumsdata/, and the full list of variables is at https://www.census.gov/programs-surveys/ acs/data/pums.html
ExerciseHours Exercise Hours

## Description

Amount of exercise per week for students (and other variables)

## Format

A data frame with 50 observations on the following 7 variables.
Year Year in school (1=First year,..., 4=Senior)
Sex F or M
Hand Left ( 1 ) or Right ( $r$ ) handed?
Exercise Hours of exercise per week
TV Hours of TV viewing per week
Pulse Resting pulse rate (beats per minute)
Pierces Number of body piercings

## Details

Data from an in-class survey of statistics students asking about amount of exercise, TV viewing, handedness, sex, pulse rate, and number of body piercings. Note the Sex variable was labeled as Gender in earlier versions of this dataset. We acknowledge that this binary dichotomization is not a complete or inclusive representation of reality.

## Source

In-class student survey.

## FacebookFriends Facebook Friends

## Description

Data on number of Facebook friends and grey matter density in brain regions related to social perception and associative memory.

## Format

A dataset with 40 observations on the following 2 variables.
GMdensity Normalized z-scores of grey matter density in certain brain regions
FBfriends Number of friends on Facebook

## Details

A recent study in Great Britain examines the relationship between the number of friends an individual has on Facebook and grey matter density in the areas of the brain associated with social perception and associative memory. The study included 40 students at City University London.

## Source

Kanai, R., Bahrami, B., Roylance, R., and Rees, G., "Online social network size is reflected in human brain structure," Proceedings of the Royal Society, 7 April 2012; 279(1732): 1327-1334. Data approximated from information in the article.
FireAnts Fire Ants

## Description

Reactions of lizards to the presence of fire ants.

## Format

A dataset with 80 observations on the following 3 variables.
Invasion Coded as Uninvaded or Invaded, depending on if the lizard comes from a region with fire ants Twitches Number of twitches the lizard makes when encountering fire ants

Flee Time for the lizard to flee in seconds (more than one minute is recorded as 61).

## Details

The red imported fire ant, Solenopsis invicta, is native to South America, but has an expansive invasive range, including much of the southern United States (invasion of this ant is predicted to go global). In the United States, these ants occupy similar habitats as fence lizards. The ants eat the lizards and the lizards eat the ants, and in either scenario the venom from the fire ant can be fatal to the lizard. The study explored the question of whether lizards learn to adapt their behavior if their environment has been invaded by fire ants by taking lizards from an uninvaded habitat (eastern Arkansas) and lizards from an invaded habitat (southern Alabama, which has been invaded for more than 70 years), exposing them to fire ants, and measuring how long it takes each lizard to flee and the number of twitches each lizard does.

## Source

Langkilde, T. (2009). "Invasive fire ants alter behavior and morphology of native lizards"", Ecology, 90(1): 208-217. Thanks to Dr. Langkilde for providing the data.
FisherIris Fisher's Iris Data

## Description

Measurements of three iris species

## Format

A dataset with 150 observations on the following 5 variables.
Type Species of iris, Setosa, Virginica, or Versicolor
PetalLength Petal length in mm .
PetalWidth Petal width in mm .
SepalLength Sepal length in mm.
SepalWidth Sepal width in mm.

## Details

Data used in Fisher's 1936 paper, this famous dataset looks at measurements for samples of three different species of iris. The petal is part of the flower itself and the sepals are green leaves, directly under the petals, providing support.

## Source

R. A. Fisher (1936). "The use of multiple measurements in taxonomic problems". Annals of Eugenics 7 (2): 179-188. doi:10.1111/j.1469-1809.1936.tb02137.x.

## FishGills12 Fish Respiration and Calcium - Full Data

## Description

An experiment to look at fish respiration rates in water with different levels of calcium.

## Format

A dataset with 360 observations on the following 2 variables.

$$
\begin{aligned}
\text { Calcium } & \text { Amount of calcium in the water }(\mathrm{mg} / \mathrm{L}) \\
\text { GillRate } & \text { Respiration rate (beats per minute) }
\end{aligned}
$$

## Details

Fish were randomly assigned to twelve tanks with different levels (measured in $\mathrm{mg} / \mathrm{L}$ ) of calcium. Respiration rate was measured as number of gill beats per minute.

## Source

Thanks to Prof. Brad Baldwin for supplying the data.

FishGills3 Fish Respiration and Calcium

## Description

Respiration rate for fish in three levels of calcium.

## Format

A dataset with 90 observations on the following 2 variables.
Calcium Level of calcium Low $0.71 \mathrm{mg} / \mathrm{L}$, Medium $5.24 \mathrm{mg} / \mathrm{L}$, or High $18.24 \mathrm{mg} / \mathrm{L}$
GillRate Respiration rate (beats per minute)

## Details

Fish were randomly assigned to three tanks with different levels (low, medium and high) of calcium. Respiration rate was measured as number of gill beats per minute.

## Source

Thanks to Prof. Brad Baldwin for supplying the data.

## Flight433 Flight 433

## Description

Flight times for Flight 433 (Boston-SF) in January 2019.

## Format

A data frame with 28 observations on the following variable.
AirTime Airborne flying fime (in minutes) for Flight 433, Boston to San Francisco

## Details

United Airlines Flight 433 was a daily flight from Boston to San Francisco. The data show the airborne flying times for the flight on each day of January 2019.
**Updated for 3e (earlier version from 2016 is in Flight433_2e) **

## Source

Data collected from the Bureau of Transportation Statistics website at http://www.bts.gov/xml/ ontimesummarystatistics/src/dstat/OntimeSummaryAirtime.xml

| FloridaLakes $\quad$ Florida Lakes |
| :--- | :--- |

## Description

Water quality measurements for a sample of lakes in Florida

## Format

A dataset with 53 observations on the following 12 variables.

| ID | An identifying number for each lake |
| ---: | :--- |
| Lake | Name of the lake |
| Alkalinity | Concentration of calcium carbonate (in $\mathrm{mg} / \mathrm{L}$ ) |
| pH | Acidity |
| Calcium | Amount of calcium in water |
| Chlorophyll | Amount of chlorophyll in water |
| AvgMercury | Average mercury level for a sample of fish (large mouth bass) from each lake |

```
    NumSamples Number of fish sampled at each lake
    MinMercury Minimum mercury level in a sampled fish
    MaxMercury Maximum mercury level in a sampled fish
ThreeYrStdMercury Adjusted mercury level to account for the age of the fish
    AgeData Mean age of fish in each sample
```


## Details

This dataset describes characteristics of water and fish samples from 53 Florida lakes. Some variables (e.g. Alkalinity, pH , and Calcium) reflect the chemistry of the water samples. Mercury levels were recorded for a sample of large mouth bass selected at each lake.

## Source

Lange, Royals, and Connor, Transactions of the American Fisheries Society (1993)

## FootballBrain Football Brain Measurements

## Description

Brain measurements for non-football players, football players with no concussion history, and football players with a concussion history.

## Format

A dataset with 75 observations on the following 5 variables.
Group Control=no football, FBNoConcuss=football player but no concussions, or FBConcuss=football player with concussion history
Hipp Total hippocampus volume, in microL
LeftHipp Left hippocampus volume, in microL
Years Number of years playing football
Cognition Cognitive testing composite reaction time score, given as a percentile

## Details

The study included 3 groups, with 25 cases in each group. The control group consisted of healthy individuals with no history of brain trauma who were comparable to the other groups in age, sex, and education. The second group consisted of NCAA Division 1 college football players with no history of concussion, while the third group consisted of NCAA Division 1 college football players with a history of concussion. High resolution MRI was used to collect brain hippocampus volume. Data were collected between June 2011 and August 2013. The data values given here are estimated from information given in the paper.

## Source

Singh R, Meier T, Kuplicki R, Savitz J, et al., "Relationship of Collegiate Football Experience and Concussion With Hippocampal Volume and Cognitive Outcome," JAMA, 311(18), 2014

```
ForestFires Forest Fires
```


## Description

Characteristics of forest fires in Montesinho park (Portugal)

## Format

A data frame with 517 observations on the following 13 variables.
$X$ West to east coordinates for the site ( $1=$ farthest west to $9=$ farthest east)
Y North to south coordinates for the site (1=farthest north to $9=$ farthest south)
Month Month of the year (jan to dec)
Day Day of the week (sun to sat)
FFMC Fine fuel moisture code
DMC Duff moisture code
DC Drought code
ISI Initial spread index
Temp Outside temperature (in celsius)
RH Relative humidity (in \%)
Wind Wind speed (in km/h)
Rain Rain in past 30 minutes (in mm/sq-m)
Area Total burned area (in hectares)

## Details

Data were recorded for fires in the Montesinho natural park in Portugal between January 2000 and December 2003. A map of the park (see the pdf linked below) is divided into 9 x 9 grid sections (given by the $\mathrm{x}, \mathrm{y}$-coordinates in the first two columns of the dataset). There are four components of a Fire Weather Index that rate how weather conditions might increase fire danger. FFMC. DMC, and DC reflect various measures of moisture content, while the ISI score indicated how fast a fire might spread (for example, by wind). For all four measures larger values are associated with more fire danger. Fires that are less than 100 square meters in size ( 0.01 hectares) are recorded as Area=0.

## Source

Data downloaded from the UCI Machine Learning Repository, https://archive.ics.uci.edu/ ml/datasets/Forest+Fires
Original article: P. Cortez and A. Morais. "A Data Mining Approach to Predict Forest Fires using Meteorological Data", in New Trends in Artificial Intelligence, Proceedings of the 13th EPIA 2007 Portuguese Conference on Artificial Intelligence (December 2007) http://www.dsi.uminho.pt/ ~pcortez/fires.pdf

## GeneticDiversity Genetic Diversity

## Description

Genetic diversity for different populations are compared to the distance from East Africa.

## Format

A dataset with 52 observations on the following 5 variables.

| Population | Identifier for each population |
| ---: | :--- |
| Country | Main country where the population is found |
| Continent | Continent where the population is found |
| GeneticDiversity | A measure of genetic diversity in the population |
| Distance | Distance by land to East Africa (in km) |

## Details

The data give a measure of genetic diversity for different populations and the geographic distance of each population from East Africa (Addis Ababa, Ethiopia), as one would travel over the surface of the earth by land (migration long ago is thought to have happened by land).

## Source

Calculated using data from S Ramachandran, O Deshpande, CC Roseman, NA Rosenberg, MW Feldman, LL Cavalli-Sforza. "Support from the relationship of genetic and geographic distance in human populations for a serial founder effect originating in Africa," " Proceedings of the National Academy of Sciences, 2005, 102: 15942-15947.

## Description

Internet usage for several countries

## Format

A data frame with 9 observations on the following 3 variables.
Country Name of country
InternetSpeed Average download speed (in Mb)
HoursOnline Average hours online per day

## Details

The Worldwide Broadband Speed League tests internet speeds at millions of access points around the world. The average download speed for each country is derived from those data. The DataReportal site provides summaries of country level data on internet usage obtained from various sources. The average number of hours spent online for each country is based on survey data reported at that site.
** Updated for 3 e (earlier version from 2011 is at GlobalInternet2011).

## Source

Internet speeds for 2019 downloaded from https://www.cable.co.uk/broadband/speed/worldwide-speed-league Online hours for 2019 downloaded from https://datareportal.com/library

## GolfRound <br> Golf Round

## Description

Scorecard for 18 holes of golf

## Format

A data frame with 18 observations on the following 4 variables.
Hole Hole number (1 to 18)
Distance Length of the hole (in yards)
Par Par for the hole
Score Actual number of stokes needed in this round

## Details

Data come from a scorecard for one round of golf at the Potsdam Country Club. Par is the expected number of strokes a good golfer should need to complete the hole.

## Source

Personal file
GPAbySex GPA by Sex

## Description

Data from a survey of introductory statistics students.

## Format

A dataset with 343 observations on the following 6 variables.

```
Exercise Hours of exercise (per week)
            SAT Combined SAT scores (out of 1600)
            GPA Grade Point Average (0.00-4.00 scale)
    Pulse Pulse rate (beats per minute)
Piercings Number of body piercings
    CodedSex \(0=\) female or \(1=\) male
```


## Details

This is a subset of the StudentSurvey dataset where cases with missing values have been dropped and sex is coded as a $0 / 1$ indicator variable.

## Source

A first day survey over several different introductory statistics classes.

[^0]
## Description

Game log data for the Golden State Warriors basketball team in 2018-2019

## Format

A data frame with 82 observations on the following 33 variables.
Game ID number for each game
Date Date the game was played (mm/dd/yyy)
Location Away or Home
Opp Opponent team
Win Game result: L or W
Points Number of points scored
FG Field goals made
FGA Field goals attempted
FG3 Three-point field goals made
FG3A Three-point field goals attempted
FT Free throws made
FTA Free throws attempted
Rebounds Total rebounds
OffReb Offensive rebounds
Assists Number of assists
Steals Number of steals
Blocks Number of shots blocked
Turnovers Number of turnovers

Fouls Number of fouls
OppPoints Opponent's points scored
OppFG Opponent's field goals made
OppFGA Opponent's field goals attempted
OppFG3 Opponent's three-point field goals made
OppFG3A Opponent's three-point field goals attempted
OppFT Opponent's free throws made
OppFTA Opponent's free throws attempted
OppRebounds Opponent's total rebounds
OppOffReb Opponent's offensive rebounds
OppAssists Opponent's assists
OppSteals Opponent's steals
OppBlocks Opponent's shots blocked
OppTurnovers Opponent's turnovers
OppFouls Opponent's fouls

## Details

Information from online boxscores for all 82 regular season games played by the Golden State Warriors basketball team during the 2018-2019 season.
** Updated for third edition (2e version is now GSWarriors2016, 1e version is MiamiHeat dataset) **

## Source

Data for the 2018-2019 Golden State games downloaded from http: //www. basketball-reference. com/teams/GSW/2019/gamelog/

## HappyPlanetIndex Happy Planet Index

## Description

Measurements related to happiness and well-being for 143 countries.

## Format

A dataset with 143 observations on the following 11 variables.
Country Name of country
Region 1=Latin America, 2=Western nations, 3=Middle East, 4=Sub-Saharan Africa, $5=$ South Asia, $6=$ East Asia, $7=$ former Communist countries
Happiness Score on a $0-10$ scale for average level of happiness (10 is happiest)
LifeExpectancy Average life expectancy (in years)
Footprint Ecological footprint - a measure of the (per capita) ecological impact
HLY Happy Life Years - combines life expectancy with well-being
HPI Happy Planet Index ( $0-100$ scale)

```
    HPIRank HPI rank for the country
GDPperCapita Gross Domestic Product (per capita)
    HDI Human Development Index
    Population Population (in millions)
```


## Details

Data for 143 countries from the Happy Planet Index Project that works to quantify indicators of happiness, well-being, and ecological footprint at a country level.

## Source

Marks, N., "The Happy Planet Index", www.TED.com/talks, August 29, 2010.
Data downloaded from http://www.happyplanetindex.org/data/

## HeatCognition Heat and Cognition

## Description

Effect of heat on cognitive ability

## Format

A data frame with 46 observations on the following 3 variables.
AC Whether the student had air conditioning on in the room, No or Yes
MathZRT Z-score of reaction time solving math problems
ColorsZRT Z-score of reaction time solving STROOP color problems

## Details

Forty-six college students were asked to solve cognitive problems first thing in the morning during a heat wave in their Northeastern city. Twenty of the students had air-conditioning in their rooms and twenty-six did not. Z-scores of reaction times are given for math problems and for color dissonance problems.

## Source

Cedeo Laurent JG, Williams A, Oulhote Y, Zanobetti A, Allen JG, Spengler JD "Reduced cognitive function during a heat wave among residents of non-air-conditioned buildings: An observational study of young adults in the summer of 2016." PLoS Med 15(7): e1002605, July 10, 2018. https: //doi.org/10.1371/journal.pmed.1002605. (Dataset is simplified from the repeated measures design used in the original study.)

## HeightData Height Data

## Description

Heights measured for the same 94 children over 18 years.

## Format

A dataset with 94 observations on the following 33 variables.

| ID | Identification number) |
| ---: | :--- |
| Sex | M or F |
| Year_1 | Height (in cm.) at age 1 year |
| Year_1.25 | Height (in cm.) at age 1.25 years |
| Year_1.5 | Height (in cm.) at age 1.5 years |
| Year_1.75 | Height (in cm.) at age 1.75 years |
| Year_2 | Height (in cm.) at age 2 years |
| Year_3 | Height (in cm.) at age 3 years |
| Year_4 | Height (in cm.) at age 4 years |
| Year_5 | Height (in cm.) at age 5 years |
|  | See below for full list of years... |
| Year_17.5 | Height (in cm.) at age 17.5 years |
| Year_18 | Height (in cm.$)$ at age 18 years |

## Details

In the 1940's and 1950's, the heights of 39 boys and 54 girls, in centimeters, were measured at 30 different time points between the ages of 1 and 18 years as part of the University of California Berkeley growth study. Ages for measurement are $1,1,25,1,5,1,75,2,3,4,5,6,7,8,8.5,9,9.5$, $10,10.5,11,11,5,12,12.5,13,13.5,14,14.5,15,15.5,16,16.5,17,17.5,18$.

## Source

Tuddenham, R. D., and Snyder, M. M. (1954) "Physical growth of California boys and girls from birth to age 18", University of California Publications in Child Development, 1, 183-364.

HockeyPenalties2019 Hockey Penalties (2019)

## Description

Penalty minutes (per game) for NHL teams in 2018-2019

## Format

A data frame with 30 observations on the following 4 variables.
Team Name of the team

PIM Average penalty minutes per game
OppPIM Average opponent's penalty mnutes per game
Playoff Did the team make the playoffs? ( N or Y )

## Details

Data give the average number of penalty minutes for each of the 30 National Hockey League (NHL) teams (and their opponents) during the 2018-2019 regular season.
** Updated for 3e (earlier version from 2010-11 is at HockeyPenalties2011). **

## Source

Data obtained online at https://www.hockey-reference.com/leagues/NHL_2019.html\#all_ stats

## HollywoodMovies Hollywood Movies

## Description

Data on movies released in Hollywood between 2012 and 2018

## Format

A data frame with 1295 observations on the following 15 variables.
Movie Title of the movie
LeadStudio Primary U.S. distributor of the movie RottenTomatoes Rotten Tomatoes rating (critics)

AudienceScore Audience rating (via Rotten Tomatoes)
Genre One of Action Adventure, Black Comedy, Comedy, Concert, Documentary, Drama, Horror, Musical, Romantic Comedy, Thriller, or Western

TheatersOpenWeek Number of screens for opening weekend OpeningWeekend Opening weekend gross (in millions)
BOAvgOpenWeekend Average box office income per theater, opening weekend
Budget Production budget (in millions)
DomesticGross Gross income for domestic (U.S.) viewers (in millions)
WorldGross Gross income for all viewers (in millions)
ForeignGross Gross income for foreign viewers (in millions)
Profitability WorldGross as a percentage of Budget
OpenProfit Percentage of budget recovered on opening weekend
Year Year the movie was released

## Details

Information from 1295 movies released from Hollywood between 2012 and 2018.
** Updated for 3e (earlier versons are HollywoodMovies2013 and HollywoodMovies2011). **

## Source

Movie data obtained from
https://www.boxofficemojo.com/
https://www.the-numbers.com/
https://www.rottentomatoes.com/

```
HomesForSale Homes For Sale (2019)
```


## Description

Data on homes for sale in four states in 2019

## Format

A data frame with 120 observations on the following 5 variables.
State Location of the home (CA, NJ, NY, or PA)
Price Asking price (in $\$ 1,000$ 's)
Size Area of all rooms (in 1,000 's sq. ft.)
Beds Number of bedrooms
Baths Number of bathrooms

## Details

Data for samples of homes for sale in each state, selected from zillow.com.
** Updated for 3e (earlier version from 2010 is in HomesForSale2e).

## Source

Data collected from www. zillow. com in 2019.

HomesForSaleCA Homes For Sale in California (2019)

## Description

Data for a sample of homes offered for sale in California

## Format

A data frame with 30 observations on the following 5 variables.
State Location of the home (CA)
Price Asking price (in $\$ 1,000$ 's)
Size Area of all rooms (in 1,000 's sq. ft.)
Beds Number of bedrooms
Baths Number of bathrooms

## Details

Data fora sample of homes for sale in California, selected from zillow.com. This is a subset of the HomesForSale dataset.
** Updated for 3e (earlier version from 2010 is in HomesForSaleCA2e). **

## Source

Data collected from www.zillow. com in 2019.

HomesForSaleCanton Homes For Sale in Canton, NY (2019)

## Description

Data for a sample of homes offered for sale in Canton, NY

## Format

A data frame with 30 observations on the following 4 variables.
Price Asking price (in $\$ 1,000$ 's)
Size Area of all rooms (in 1,000 's sq. ft.)
Beds Number of bedrooms
Baths Number of bathrooms

## Details

Data for a sample of homes for sale in Canton, NY, selected from zillow.com.
** Updated for 3e (earlier version from 2010 is in HomesForSaleCanton2e). **

## Source

Data collected from www.zillow. com in 2019.

HomesForSaleNY Homes For Sale in New York (2019)

## Description

Data for a sample of homes offered for sale in New York (state)

## Format

A data frame with 30 observations on the following 5 variables.
State Location of the home (NY)
Price Asking price (in $\$ 1,000$ 's)
Size Area of all rooms (in 1,000 's sq. ft.)
Beds Number of bedrooms
Baths Number of bathrooms

## Details

Data for a sample of homes for sale in New York, selected from zillow.com. This is a subset of the HomesForSale dataset.
** Updated for 3e (earlier version from 2010 is in HomesForSaleNY2e). **

## Source

Data collected from www.zillow. com in 2019.
HomingPigeons Homing Pigeons

## Description

Results from the 2019 Midwest Classic Homing Pigeon race

## Format

A data frame with 1412 observations on the following 5 variables.
Position Finishing position in the race
Loft Name of the pigeon's home loft
Sex $\mathrm{C}=$ cock (male) or $\mathrm{H}=$ hen (female)
Distance Distance (in miles) from release point to home loft
Speed Speed (in yards per minute)

## Details

Finishing results from 1412 pigeons completing the 2019 Midwest Classic race for homing pigeons on June 30, 2019. Each loft may enter multiple pigeons.

## Source

Final race report from the Midwest Homing Pigeon Association, downloaded from http://www. midwesthpa.com/MIDFinalReports.htm

## Honeybee Honeybee Colonies

## Description

Number of honeybee colonies (1995-2012)

## Format

A dataset with 18 observations on the following 2 variables.
Year Year
Colonies Estimated number of honeybee colonies in the US (in thousands)

## Details

Data collected from the USDA on the estimated number of honeybee colonies in the US for the years 1995 through 2012.

## Source

USDA National Agriculture and Statistical Services, http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1191 Accessed September 2015.

```
HoneybeeCircuits Honeybee Circuits
```


## Description

Number of circuits for honeybee dances and nest quality

## Format

A dataset with 78 observations on the following 2 variables.
Circuits Number of waggle dance circuits for a returning scout bee
Quality Quality of the nest site: High or Low

## Details

When honeybees are looking for a new home, they send out scouts to explore options. When a scout returns, she does a "waggle dance" with multiple circuit repetitions to tell the swarm about the option she found. The bees then decide between the options and pick the best one. Scientists wanted to find out how honeybees decide which is the best option, so they took a swarm of honeybees to an island with only two possible options for new homes: one of very high honeybee quality and one of low quality. They then kept track of the scouts who visited each option and counted the number of waggle dance circuits each scout bee did when describing the option.

## Source

Seeley, T., Honeybee Democracy, Princeton University Press, Princeton, NJ, 2010, p. 128
HoneybeeWaggle Honeybee Waggle

## Description

Honeybee dance duration and distance to nesting site

## Format

A dataset with 7 observations on the following 2 variables.

Distance Distance to the potential nest site (in meters)<br>Duration Duration of the waggle dance (in seconds)

## Details

When honeybee scouts find a food source or a nice site for a new home, they communicate the location to the rest of the swarm by doing a "waggle dance." They point in the direction of the site and dance longer for sites farther away. The rest of the bees use the duration of the dance to predict distance to the site.

## Source

Seeley, T., Honeybee Democracy, Princeton University Press, Princeton, NJ, 2010, p. 128

## HotDogs2019 Hot Dog Eating Contest

## Description

Winning number of hot dogs consumed in an eating contest (2002-2019)

## Format

A data frame with 18 observations on the following 2 variables.

Year Year of the contest: 2002 to 2019
HotDogs Winning number of hot dogs consumed

## Details

Every Fourth of July, Nathan's Famous in New York City holds a hot dog eating contest, in which contestants try to eat as many hot dogs (with buns) as possible in ten minutes. The winning number of hot dogs are given for each year from 2002-2019.
** Data set updated for 3e (earlier versions are HotDogs2015 and HotDogs1e) **

## Source

HouseStarts2018 Housing Starts (2000-2018)

## Description

Quarterly housing starts in the United States from 2000-2018

## Format

A data frame with 76 observations on the following 3 variables.
Year Year (2000 to 2018)
Quarter Q1=Jan-Mar, Q2=Apr-June, Q3=July-Sept, Q4=Oct-Dec
Houses New US residential house construction starts (in thousands)

## Details

Number of new homes started in the US for each quarter from 2000-2018.
Updated for 3e (earlier version is in HouseStarts2015)

## Source

Census.gov website https://www.census.gov/econ/currentdata/
https://www.census.gov/econ/currentdata/dbsearch?program=RESCONST\&startYear=2000\& endYear=2018\&categories=STARTS\&dataType=SINGLE\&geoLevel=US\&notAdjusted=1\&submit= GET+DATA\&releaseScheduleId=

HumanTears25 Human Tears -Sadness and Sexual Arousal

## Description

Differences in sadness and sexual arousal ratings for 25 men sniffing female tears or a placebo in a matched pairs experiment.

## Format

A data frame with 25 observations on the following 2 variables.
SexDiff Difference in sexual arousal rating (placebo rating - tears rating)
SadDiff Difference in sadness rating (placebo rating - tears rating)

## Details

Twenty-five men had a pad attached to their upper lip that contained either female tears collected from women who watched a sad film or a salt solution (as a placebo) that had been trickled down the same women's faces. The data were collected following a double-blind matched pairs design, where the order was randomized. The men were shown pictures of female faces and asked "To what extent is this face sad?" or "To what extent is this face sexually arousing?" Men's answers were input using a Visual Analog Scale, which were then converted to a scale with results between about 200 and 800 . The data show the difference in rating (placebo rating minus sadness rating) for each man for the sad question (SadDiff) or the sexual arousal question (SexDiff). .Data are approximated from information given in the article.

## Source

Gelstein, S, et al., "Human Tears Contain a Chemosignal," Science, 331(6014), 226-230, January 14, 2011.

```
HumanTears50 Human Tears-Testosterone
```


## Description

Differences in testosterone levels for 50 men in a matched pairs experiment, where the differences are between sniffing female tears and sniffing a placebo

## Format

A data frame with 50 observations on the following 3 variables.
Placebo Testosterone level after sniffing a placebo
Tears Testosterone level after sniffing female tears
Difference Difference in testosterone level (Placebo - Tears)

## Details

Fifty men had a pad attached to their upper lip that contained either female tears collected from women who watched a sad film or a salt solution (as a placebo) that had been trickled down the same women's faces. The data were collected following a double-blind matched pairs design, where the order was randomized and the data were collected on consecutive days. After sniffing each substance (placebo or tears), men had their salivary testosterone levels measured, in $\mathrm{pg} / \mathrm{ml}$. Data are approximated from information given in the article.

## Source

Gelstein, S, et al., "Human Tears Contain a Chemosignal," Science, 331(6014), 226-230, January 14, 2011.

Hurricanes2018 Hurricanes (1914 to 2018)

## Description

Hurricanes in the North Atlantic each year (1914-2018)

## Format

A data frame with 105 observations on the following 2 variables.
Year Year (1914 to 2018)
Hurricanes Number of North Atlantic hurricanes

## Details

Number of North Atlantic hurricanes - yearly 1914-2018.
** Updated for 3e (ealier version through 2014 is in Hurricanes2014). *

## Source

Weather Underground website at https://www.wunderground.com/hurricane/hurrarchive. asp

## ICUAdmissions Intensive Care Unit Admissions

## Description

Data from patients admitted to an intensive care unit

## Format

A dataset with 200 observations on the following 21 variables.

```
            ID Patient ID number
    Status Patient status: 0=lived or 1=died
            Age Patient's age (in years)
            Sex 0=male or 1=female
            Race Patient's race: 1=white, 2=black, or 3=other
Service Type of service: 0=medical or 1=surgical
            Cancer Is cancer involved? 0=no or 1=yes
            Renal Is chronic renal failure involved? 0=no or 1=yes
Infection Is infection involved? 0=no or 1=yes
            CPR Patient gets CPR prior to admission? 0=no or 1=yes
    Systolic Systolic blood pressure (in mm of Hg}\mathrm{ )
HeartRate Pulse rate (beats per minute)
    Previous Previous admission to ICU wihtin 6 months? 0=no or 1=yes
            Type Admission type: 0=elective or 1=emergency
    Fracture Fractured bone involved? 0=no or 1=yes
```

| PO2 | Partial oxygen level from blood gases under $60 ? 0=$ no or $1=$ yes |
| ---: | :--- |
| PH | pH from blood gas under $7.25 ? 0=$ no or $1=$ yes |
| PCO2 | Partial carbon dioxide level from blood gas over 45? $0=$ no or $1=$ yes |
| Bicarbonate | Bicarbonate from blood gas under 18? $0=$ no or $1=$ yes |
| Creatinine | Creatinine from blood gas over $2.0 ? 0=$ no or $1=$ yes |
| Consciousness | Level: $0=$ conscious, $1=$ deep stupor, or $2=$ coma |

## Details

Data from a sample of 200 patients following admission to an adult intensive care unit (ICU).

## Source

DASL dataset downloaded from http://lib.stat.cmu.edu/DASL/Datafiles/ICU.html

## ImmuneTea Immune Tea

## Description

Interferon gamma production and tea drinking

## Format

A dataset with 21 observations on the following 2 variables.

$$
\begin{aligned}
\text { InterferonGamma } & \text { Measure of interferon gamma production } \\
\text { Drink } & \text { Type of drink: Coffee or Tea }
\end{aligned}
$$

## Details

Eleven healthy non-tea-drinking individuals were asked to drink five or six cups of tea a day, while ten healthy non-tea and non-coffee-drinkers were asked to drink the same amount of coffee, which has caffeine but not the L-theanine that is in tea. The groups were randomly assigned. After two weeks, blood samples were exposed to an antigen and production of interferon gamma was measured.

## Source

Adapted from Kamath, et.al., "Antigens in tea-Beverage prime human V 2V2 T cells in vitro and in vivo for memory and non-memory antibacterial cytokine responses", Proceedings of the National Academy of Sciences, May 13, 2003.

InkjetPrinters Inkjet Printers

## Description

Data from online reviews of inkjet printers

## Format

A dataset with 20 observations on the following 6 variables.

| Model | Model name of printer |
| ---: | :--- |
| PPM | Printing rate (pages per minute) for a benchmark set of print jobs |
| PhotoTime | Time (in seconds) to print $4 \times 6$ color photos |
| Price | Typical retail price (in dollars) |
| CostBW | Cost per page (in cents) for printing in black \& white |
| CostColor | Cost per page (in cents) for printing in color |

## Details

Information from reviews of inkjet printers at PCMag.com in August 2011.

## Source

Inkjet printer reviews found at http://www.pcmag.com/reviews/printers, August 2011.

LifeExpectancyVehicles
Life Expectancy and Vehicle Registrations (2017)

## Description

Yearly US life expectancy and number of registered vehicles (1970-2017)

## Format

A data frame with 48 observations on the following 3 variables.
Year Year (1970 to 2017)
LifeExpectancy Average life expectancy (in years) for babies born in the year
Vehicles Number of motor vehicles registered in the US (in millions)

## Details

Life expectancy (in years for babies born each year) and number of vehicles registered in the US for each year from 1970 to 2017.
** Updated for 3e (earlier versoins are LifeExpectancyVehicles2e and LifeExpectancyVehicles1e) **

## Source

Vehicle registrations from the Federal Highway Administration, https://www.fhwa.dot.gov/ policyinformation/statistics.cfm.

Lifetime data from the Centers for Disease Control and Prevention, National Center for Health Statistics, Health Data Interactive, www.cdc.gov/nchs/hdi.htm.

## LightatNight Light at Night for Mice

## Description

Data on body mass gain from an experiment with mice having different nighttime light conditions

## Format

A dataset with 18 observations on the following 2 variables.

$$
\begin{aligned}
\text { Group } & \text { Light=dim light at night or Dark=dark at night } \\
\text { BMGain } & \text { Body mass gain (in grams over a three week period) }
\end{aligned}
$$

## Details

In this study, 18 mice were randomly split into two groups. One group was on a normal light/dark cycle (Dark) and the other group had light during the day and dim light at night (Light). The dim light was equivalent to having a television set on in a room. The mice in darkness ate most of their food during their active (nighttime) period, matching the behavior of mice in the wild. The mice with dim light at night, however, consumed much of their food during the well-lit rest period, when most mice are usually sleeping. The change in body mass was recorded after three weeks.
** See also LightatNight4Weeks or LightatNight8Weeks for more variables measured at other points in the same experiment, with a third experimental condition which had 9 additional mice with a bright light on all the time. **

## Source

Fonken, L., et. al., "Light at night increases body mass by shifting time of food intake," Proceedings of the National Academy of Sciences, October 26, 2010; 107(43): 18664-18669.

LightatNight4Weeks Light at Night for Mice - After 4 Weeks

## Description

Data from an experiment with mice having different nighttime light conditions

## Format

A dataset with 27 observations on the following 9 variables.
Light $D M=$ dim light at night, $L D=$ dark at night, or LL=bright light at night
BMGain Body mass gain (in grams over a four week period)
Corticosterone Blood corticosterone level (a measure of stress)
DayPct Percent of calories eaten during the day
Consumption Daily food consumption (grams)
GlucoseInt Glucose intolerant? No or Yes

GTT15 Glucose level in the blood 15 minutes after a glucose injection
GTT120 Glucose level in the blood 120 minutes after a glucose injection
Activity A measure of physical activity level

## Details

In this study, 27 mice were randomly split into three groups. One group was on a normal light/dark cycle (LD), one group had bright light on all the time (LL), and one group had light during the day and dim light at night (DM). The dim light was equivalent to having a television set on in a room. The mice in darkness ate most of their food during their active (nighttime) period, matching the behavior of mice in the wild. The mice in both dim light and bright light, however, consumed more than half of their food during the well-lit rest period, when most mice are sleeping. Values in this dataset are recorded after four weeks in the experimental condition.
** This dataset was named LightatNight in the first edition **
** See also LightatNight8Weeks for the same data after 8 weeks or LightatNight with just BMGain after 3 weeks for the DM and LD groups. **

## Source

Fonken, L., et. al., "Light at night increases body mass by shifting time of food intake," Proceedings of the National Academy of Sciences, October 26, 2010; 107(43): 18664-18669.

## LightatNight8Weeks Light at Night for Mice - After 8 Weeks

## Description

Data from an experiment with mice having different nighttime light conditions

## Format

A dataset with 27 observations on the following 9 variables.

| Light | DM=dim light at night, LD=dark at night, or $L L=$ bright light at night <br> BMGain |
| ---: | :--- |
| Body mass gain (in grams over an eight week period) |  |
| Corticosterone | Blood corticosterone level (a measure of stress) |
| DayPct | Percent of calories eaten during the day |
| Consumption | Daily food consumption (grams) |
| GlucoseInt | Glucose intolerant? No or Yes |
| GTT15 | Glucose level in the blood 15 minutes after a glucose injection |
| GTT120 | Glucose level in the blood 120 minutes after a glucose injection |
| Activity | A measure of physical activity level |

## Details

In this study, 27 mice were randomly split into three groups. One group was on a normal light/dark cycle (LD), one group had bright light on all the time (LL), and one group had light during the day and dim light at night (DM). The dim light was equivalent to having a television set on in a room. The mice in darkness ate most of their food during their active (nighttime) period, matching the
behavior of mice in the wild. The mice in both dim light and bright light, however, consumed more than half of their food during the well-lit rest period, when most mice are sleeping. Values in this dataset are recorded after eight weeks in the experimental condition.
** See also LightatNight4Weeks for the same data after 4 weeks or LightatNight with just BMGain after 3 weeks for just the DM and LD groups. **

## Source

Fonken, L., et. al., "Light at night increases body mass by shifting time of food intake," Proceedings of the National Academy of Sciences, October 26, 2010; 107(43): 18664-18669.

```
MalevolentUniformsNFL Malevolent Uniforms NFL
```


## Description

Perceived malevolence of uniforms and penalties for National Football League (NFL) teams

## Format

A dataset with 28 observations on the following 3 variables.

| NFLTeam | Team name |
| ---: | :--- |
| NFL_Malevolence | Score reflecting the "malevolence" of a team's uniform |
| ZPenYds | Z-score for penalty yards |

## Details

Participants with no knowledge of the teams rated the jerseys on characteristics such as timid/aggressive, nice/mean and good/bad. The averages of these responses produced a "malevolence" index with higher scores signifying impressions of more malevolent uniforms. To measure aggressiveness, the authors used the amount of penalty yards converted to z -scores and averaged for each team over the seasons from 1970-1986.

## Source

Frank and Gilovich, "The Dark Side of Self- and Social Perception: Black Uniforms and Aggression in Professional Sports", Journal of Personality and Social Psychology, Vol. 54, No. 1, 1988, p. 7485.

MalevolentUniformsNHL Malevolent Uniforms NHL

## Description

Perceived malevolence of uniforms and penalties for National Hockey League (NHL) teams

## Format

A dataset with 28 observations on the following 3 variables.

| NHLTeam | Team name |
| ---: | :--- |
| NHL_Malevolence | Score reflecting the "malevolence" of a team's uniform |
| ZPenMin | Z-score for penalty minutes |

## Details

Participants with no knowledge of the teams rated the jerseys on characteristics such as timid/aggressive, nice/mean and good/bad. The averages of these responses produced a "malevolence" index with higher scores signifying impressions of more malevolent uniforms. To measure aggressiveness, the authors used the amount of penalty minutes converted to z-scores and averaged for each team over the seasons from 1970-1986.

## Source

Frank and Gilovich, "The Dark Side of Self- and Social Perception: Black Uniforms and Aggression in Professional Sports", Journal of Personality and Social Psychology, Vol. 54, No. 1, 1988, p. 7485.

MammalLongevity Mammal Longevity

## Description

Longevity and gestation period for mammals

## Format

A dataset with 40 observations on the following 3 variables.

$$
\begin{aligned}
\text { Animal } & \text { Species of mammal } \\
\text { Gestation } & \text { Time from fertilization until birth (in days) } \\
\text { Longevity } & \text { Average lifespan (in years) }
\end{aligned}
$$

## Details

Dataset with average lifespan (in years) and typical gestation period (in days) for 40 different species of mammals.

## Source

2010 World Almanac, pg. 292.

ManhattanApartments Manhattan Apartment Prices (2019)

## Description

Apartment prices for sale in Manhattan in 2019

## Format

A data frame with 20 observations on the following variable.
Rent Monthly rent (in dollars)

## Details

Monthly rents for a sample of 20 one-bedroom apartments in Manhattan, NY that were advertised on Craig's List in November, 2019.

## Source

Apartments newly advertised on Craig's List at newyork.craigslist.org, November, 2019.

| MarriageAges $\quad$ Marriage Ages |
| :--- | :--- |

## Description

Ages for husbands and wives from marriage licenses

## Format

A dataset with 100 observations on the following 2 variables.

> Husband Age of husband at marriage Wife Age of wife at marriage

## Details

Data from a sample of 100 marriage licences in St. Lawrence County, NY gives the ages of husbands and wives for newly married couples.

## Source

Thanks to Linda Casserly, St. Lawrence County Clerk’s Office
MastersGolf Masters Golf Scores

## Description

Scores from the 2011 Masters golf tournament

## Format

A dataset with 20 observations on the following 2 variables.
First First round score (in relation to par)
Final Final four round score (in relation to par)

## Details

Data for a random sample of 20 golfers who made the cut at the 2011 Masters golf tournament.

## Source

2011 Masters tournament results at http://www.masters.com/en_US/discover/past_winners.html

## MateChoice Fruitfly Survival - by Mate Choice

## Description

Number of fruitflies surviving depending on number of mating choices.

## Format

A dataset with 50 observations on the following 3 variables.
Choice Number of surviving larvae (out of 200) when female had a choice of mates
NoChoice Number of surviving larvae (out of 200) when female had only one choice for a mate Difference Choice-NoChoice

## Details

In an experiment, two hundred larvae from female fruitflies that were exposed to many male fruitflies were tracked to see how many survived. This was compared to a different set of 200 larvae from females that were exposed to only one male each. Values in the dataset give how many of the 200 larvae survived. This process was replicated 50 times, so each row of the dataset corresponds to the survival counts (and difference) for one run, starting with 200 larvae of each type.

## Source

Patridge, L. (1980). "Mate choice increases a component of offspring fitness in fruit flies," Nature, 283:290-291, 1/17/80.

```
MentalMuscle Mental Muscle
```


## Description

Comparing actual movements to mental imaging movements

## Format

A dataset with 32 observations on the following 3 variables.
Action Treatment: Actual motions or Mental imaging motions
PreFatigue Time (in seconds) to complete motions before fatigue PostFatigue Time (in seconds) to complete motions after fatigue

## Details

In this study, participants were asked to either perform actual arm pointing motions or to mentally imagine equivalent arm pointing motions. Participants then developed muscle fatigue by holding a heavy weight out horizontally as long as they could. After becoming fatigued, they were asked to repeat the previous mental or actual motions. Eight participants were assigned to each group, and the time in seconds to complete the motions was measured before and after fatigue.

## Source

Data approximated from summary statistics in: Demougeot L. and Papaxanthis C., "Muscle Fatigue Affects Mental Simulation of Action," The Journal of Neuroscience, July 20, 2011, 31(29):1071210720.

## MindsetMatters

Mindset Matters

## Description

Data from a study of perceived exercise with maids

## Format

A dataset with 75 observations on the following 14 variables.

| Cond | Treatment condition: $0=$ uninformed or $1=$ informed |
| ---: | :--- |
| Age | Age (in years) |
| Wt | Original weight (in pounds) |
| Wt2 | Weight after 4 weeks (in pounds) |
| BMI | Original body mass index |
| BMI2 | Body mass index after 4 weeks |
| Fat | Original body fat percentage |
| Fat2 | Body fat percentage after 4 weeks |
| WHR | Original waist to hip ratio |
| WHR2 | Waist to hip ratio after 4 weeks |
| Syst | Original systolic blood pressure |
| Syst2 | Systolic blood pressure after 4 weeks |
| Diast | Original diastolic blood pressure |
| Diast2 | Diastolic blood pressure after 4 weeks |

## Details

In 2007 a Harvard psychologist recruited 75 female maids working in different hotels to participate in a study. She informed 41 maids (randomly chosen) that the work they do satisfies the Surgeon General's recommendations for an active lifestyle (which is true), giving them examples for how and why their work is good exercise. The other 34 maids were told nothing (uninformed). Various chacteristics (weight, body mass index, ...) were recorded for each subject at the start of the experiment and again four weeks later. Maids with missing values for weight change have been removed.

## Source

Crum, A.J. and Langer, E.J. (2007). Mind-Set Matters: Exercise and the Placebo Effect, Psychological Science, 18:165-171. Thanks to the authors for supplying the data.

## MustangPrice Mustang Prices

## Description

Price, age, and mileage for used Mustang cars at an internet website

## Format

A dataset with 25 observations on the following 3 variables.

$$
\begin{aligned}
\text { Age } & \text { Age of the car (in years) } \\
\text { Miles } & \text { Mileage on the car (in } 1,000 \text { 's) } \\
\text { Price } & \text { Asking price (in } \$ 1,000 \text { 's) }
\end{aligned}
$$

## Details

A statistics student, Gabe McBride, was interested in prices for used Mustang cars being offered for sale on an internet site. He sampled 25 cars from the website and recorded the age (in years), mileage (in thousands of miles) and asking price (in $\$ 1,000$ 's) for each car in his sample.

## Source

Student project with data collected from autotrader.com in 2008.

```
NBAPlayers2019 NBA Players Data for 2018-19 Season
```


## Description

Data from the 2018-2019 regular season for 193 NBA basketball players.

## Format

A data frame with 193 observations on the following 26 variables.
Player Name of player
Pos $\mathrm{PG}=$ point guard, $\mathrm{SG}=$ shooting guard, $\mathrm{PF}=$ power forward, $\mathrm{SF}=$ small forward, $\mathrm{C}=$ center
Age Age (in years)
Team Team name
Games Games played (out of 82)
Starts Games started

Mins Minutes played
MinPerGame Minutes per game
FGMade Field goals made
FGAttempt Field goals attempted
FGPct Field goal percentage
FG3Made Three-point field goals made
FG3Attempt Three-point field goals attempted
FG3Pct Three-point field goal percentage
FTMade Free throws made
FTAttempt Free throws attempted
FTPct Free throw percentage
OffRebound Offensive rebounds
DefRebound Defensive rebounds
Rebounds Total rebounds
Assists Number of assists
Steals Number of steals
Blocks Number of blocked shots
Turnovers Number of turnovers
Fouls Number of personal fouls
Points Number of points scored

## Details

Data for 193 NBA basketball players from the 2018-2019 regular season. Includes all players who averaged more than 24 minutes per game that season.
** Data set updated for 3e (earlier versions are NBAPlayers2015 and NBAPlayers2011).

## Source

```
http://www.basketball-reference.com/leagues/NBA_2019_stats.html
```

NBAStandings2019 NBA 2018-2019 Regular Season Standings

## Description

Won-Loss record and statistics for NBA Teams in 2018-2019

## Format

A data frame with 30 observations on the following 6 variables.
Team Team name
Wins Number of wins in an 82 game regular season
Losses Number of losses
WinPct Proportion of games won
PtsFor Average points scored per game
PtsAgainst Average points allowed per game

## Details

Won-Loss record and regular season statistics for 30 teams in the National Basketball Association for the 2018-2019 season.
** Data set updated for 3e (earlier version are NBAStandings2016 and NBAStandings1e) **

## Source

Data downloaded from http://www.basketball-reference.com/leagues/NBA_2019_games.html

```
NFLContracts2019 NFL Contracts in 2019
```


## Description

Dollar size of contracts for all NFL players in 2019

## Format

A data frame with 1988 observations on the following 5 variables.

Player Player's name
Position Code for the primary position of the player ( $\mathrm{QB}=$ quarterback, etc.)
Team Nickname of the team
TotalMoney Total value of the contract (in millions of dollars)
YearlySalary Salary (in millions of dollars) for the 2019 season

## Details

This dataset contains salary information for all National Football League (NFL) players under contract for the 2019 season. Many contracts extend over multiple years, so TotalMoney gives the overall size of the contract and YearlySalary indicates how much of that is to be paid for the 2019 season. All amounts are in millions of dollars.
** Updated for 3e (earlier version is NFLContracts2015).

## Source

Contract data collected from http://OverTheCap.com, accessed September, 2019.

NFLPreseason2019 Wins for NFL Teams (2005-2019)

## Description

Number of preseason and regular season wins for NFL teams, each year from 2005 to 2019.

## Format

A data frame with 480 observations on the following 4 variables.
Team Code for one of 32 NFL teams
Season Year between 2005 and 2019
Preseason Number of preseason wins (out of 4 games)
RegularWins Number of regular season wins (out of 16 games)

## Details

Number of wins in the preseason (out of 4 preseason games) and regular season (out of 16 regular season games) for each of the 32 National Football (NFL) teams over a fifteen year period from 2005 to 2019.
** Updated for 3e (earlier version is now NFLPreseason2014). **

## Source

Data available at http://www.pro-football-reference.com/.

```
NFLScores2018 NFL Scores in 2018
```


## Description

Results for all NFL games for the 2018 regular season

## Format

A data frame with 256 observations on the following 11 variables.
Week Week of the season (1 through 17)
HomeTeam Home team name
AwayTeam Visiting team name
HomeScore Points scored by the home team
AwayScore Points scored by the visiting team
HomeYards Yards gained by the home team
AwayYards Yards gained by the visiting team
HomeTO Turnovers lost by the home team
AwayTO Turnovers lost by the visiting team
Date Date of the game
Day Day of the week (Mon, Sat, Sun, or Thu)

## Details

Data for all 256 regular season games in the National Football League (NFL) for the 2018 season. ** Updated for 3e (earlier version is NFLScores2011). **

## Source

NFL scores and game statistics found at http://www.pro-football-reference.com/years/ 2018/games.htm.

NHANES
National Health and Nutrition Examination Survey (NHANES) Subset

## Description

A subset of the 2009-2010 National Health and Nutrition Examination Survey (NHANES).

## Format

A data frame with 4716 observations on the following 5 variables.
Case Case ID number
Organic Buy any food labeled organic (past 30 days)? (No or Yes)
Health Self-rating of health (Excellent, Very good, Fair, Good, or Poor)
HealthBinary Health with two categories: Poor / Fair / Good or Very good / Excellent
Income Monthly income? (dollars)

## Details

This dataset is a subset of the 2009-2010 National Health and Nutrition Examination Survey (NHANES). NHANES is a national survey conducted by the Centers for Disease Control and Prevention (CDC) on a random sample of Americans. This subset contains data on select variables for the subset of people with responses to the questions about buying organic food and self-reported health status.

## Source

The data were downloaded from https://www.cdc.gov/nchs/nhanes/index.htm.

## NutritionStudy Nutrition Study

## Description

Variables related to nutrition and health for 315 individuals

## Format

A dataset with 315 observations on the following 17 variables.

| ID | ID number for each subject in this sample |
| ---: | :--- |
| Age | Subject's age (in years) |
| Smoke | Smoker? coded as No or Yes |
| Quetelet | Weight/(Height^2) |
| Vitamin | Vitamin use: coded as 1=Regulary, 2=Occasionally, or 3=No |
| Calories | Number of calories consumed per day |
| Fat | Grams of fat consumed per day |
| Fiber | Grams of fiber consumed per day |
| Alcohol | Number of alcoholic drinks consumed per week |
| Cholesterol | Cholesterol consumed (mg per day) |
| BetaDiet | Dietary beta-carotene consumed (mcg per day) |
| RetinolDiet | Dietary retinol consumed (mcg per day) |
| BetaPlasma | Plasma beta-carotene (ng/ml) |
| RetinolPlasma | Plasma retinol (ng/ml) |
| Sex | Coded as Female or Male |
| VitaminUse | Coded as No Occasional Regular |
| PriorSmoke | Smoking status: coded as 1=Never, 2=Former, or 3=Current |

## Details

Data from a cross-sectional study to investigate the relationship between personal characteristics and dietary factors, and plasma concentrations of retinol, beta-carotene and other carotenoids. Study subjects were patients who had an elective surgical procedure during a three-year period to biopsy or remove a lesion of the lung, colon, breast, skin, ovary or uterus that was found to be non-cancerous.

## Source

Nierenberg, Stukel, Baron, Dain, and Greenberg, "Determinants of plasma levels of beta-carotene and retinol", American Journal of Epidemiology (1989). Data downloaded from
http://lib.stat.cmu.edu/datasets/Plasma_Retinol.

## Description

Times for all finishers in the men's marathon at the 2016 Olympics

## Format

A data frame with 140 observations on the following 4 variables.
Athlete Name of marathoner
Country Nationality of marathoner (3 letter country code)
Time Time as H:MM:SS
Minutes Time in minutes

## Details

Results for all finishers in the 2016 Men's Olympic marathon in Rio de Janeiro, Brazil.
** Updated for 3e (earlier versions are now in OlympicMarathon2012 and OlympicMarathon2008)
**

## Source

https://www.olympic.org/rio-2016/athletics/marathon-men
OrganicEffect Eating Organic Foods

## Description

Data comparing pesticide levels in family members when eating non-organic vs organic food

## Format

A dataset with 160 observations on the following 6 variables.

$$
\begin{aligned}
\text { Person } & \text { Code for family member, Father, Mother, GirlA, GirlB, Boy } \\
\text { Pesticide } & \text { One of eight different pesticides measured } \\
\text { Day } & \text { Day of the measurement (Day1, Day3, Day4, or Day6) } \\
\text { NonOrganic } & \text { Level of the pesticide after eating a non-organic diet } \\
\text { Organic } & \text { Level of the pesticide after eating an organic diet } \\
\text { Diff } & \text { Difference = NonOrganic - Organic }
\end{aligned}
$$

## Details

A study looked at a Swedish family that ate a conventional diet (non-organic), and then had them eat only organic for two weeks. Pesticide concentrations for several different pesticides were measured in micrograms $/ \mathrm{g}$ creatinine by testing morning urine. Multiple measurements were taken for each person before the switch to organic foods, and then again after participants had been eating organic for at least one week.

## Source

Magner, J., Wallberg, P., Sandberg, J., and Cousins, A.P. (2015). "Human exposure to pesticides from food: A pilot study," IVL Swedish Environmental Research Institute. https://www.coop.se/PageFiles/429812/Coop\ Ekoeffekten_Report\ ENG.pdf, January 2015

## Description

Data for 26 players on the 2018-2109 Ottawa Senators NHL team

## Format

A data frame with 26 observations on the following 10 variables.
Player Players name
Position $\mathrm{D}=$ defense, $\mathrm{C}=$ center, $\mathrm{RW}=$ right wing, $\mathrm{LW}=$ left wing
Age Age (in years)
Games Games played in the 2018-19 NHL season (out of 82)
Goals Goals
Assists Assists
Points Goals + Assists
PlusMinus Difference between (even strength) goals for and against while on ice
PenMins Number of penalty minutes
MinPerGame Average minutes on the ice per game

## Details

Data for all players (except goalies) who played at least 10 games with the Ottawa Senators hockey team in the 2018-2019 NHL season.
** Updated for 3e (previous versions are now OttawaSenators2015 and OttawaSenators1e) **

## Source

http://www.hockey-reference.com/teams/OTT/2019.html
PASeniors Pennsylvania High School Seniors

## Description

Information on a sample of high school seniors from the state of Pennsylvania between 2010 and 2019.

## Format

A data frame with 457 observations on the following 36 variables.
Year Year student submitted data
Gender Female or Male
Age Age (in years)
Hand Dominant hand (Left, Right, or Both)
Height Height (in cm)
Foot Foot length (in cm)
Armspan Armspan (in cm)
Languages Languages spoken
GetToSchool Main mode of transportation to school (Bus, Car, or Walk - Walk includes bicycle)
TravelTime Travel time to school (in minutes)
ReactionTime Time (in seconds) to click when a color changes
MemoryScore Score in an online memory game
Activity Favorite physical activity
Music Favorite genre of music
BirthMonth Birth month
Season Favorite season
Allergies Have allergies? (No or Yes)
Vegetarian Vegetarian? (No or Yes)
FavFood Favorite food
Drink Beverage used most often during the day
FavSubject Favorite subject in school
Sleep1 Typical hours of sleep on a school night
Sleep2 Typical hours of sleep on a non-school night
Occupants Number of occupants at home
Communicate Most often method to communicate with friends
TextsSent Number of texts sent (previous day)
HangHours Hours last week spent hanging out with friends
HWHours Hours last week spent doing homework
SportsHours Hours last week spent playing sports or outdoor activities
VideoGameHours Hours last week spent playing computer/video games
ComputerHours Hours last week spent using a computer
TVHours Hours last week spent watching TV
WorkHours Hours last week spent working at a paid job
SchoolPressure Amount of pressure due to schoolwork
Superpower Most desired superpower (Fly, Freeze time, Invisibility, Super strength, or Telepathy)
Preference Prefers to be Famous, Happy, Healthy, or Rich

## Details

The dataset gives responses for a random sample of high school seniors in Pennsylvania who participated in the Census at Schools project.

## Source

Data from U.S. Census at School (https://www.amstat.org/censusatschool) downloaded and used with the permission of the American Statistical Association.

```
PizzaGirl Pizza Girl Tips
```


## Description

Data on tips for pizza deliveries

## Format

A dataset with 24 observations on the following 2 variables.
Tip Amount of tip (in dollars)
Shift Data collected over three different shifts

## Details

"Pizza Girl" collected data on her deliveries and tips over three different evening shifts.

## Source

Pizza Girl: Statistical Analysis at
http://slice.seriouseats.com/archives/2010/04/statistical-analysis-of-a-pizza-delivery-shift-20100429.html.

| PumpkinBeer $\quad$ Pumpkin Beer |
| :--- | :--- |

## Description

Ratings of different kinds of pumpkin beer by a wife and husband

## Format

A data frame with 18 observations on the following 8 variables.
Name Name of pumpkin beer
Brewer Name of brewery that produced the beer
WifeRating Rating on a $0-10$ scale by the wife
HusbandRating Rating on a $0-10$ scale by the husband

WifeComments Text of comments by the wife
HusbandComments Text of comments by the husband
Average Average of the two ratings (wife and husband)
Year Year the ratings were done (2011 to 2019)

## Details

A Lock wife and husband are fans of pumpkin flavored beer, so they have each rated a variety of different brands of pumpkin beer over the years.

## Source

Personal records

```
QuizPulse10 Quiz vs Lecture Pulse Rates
```


## Description

Paired data with pulse rates in a lecture and during a quiz for 10 students

## Format

A dataset with 10 observations on the following 3 variables.

| Student | ID number for the student |
| ---: | :--- |
| Quiz | Pulse rate (beats per minute) during a quiz |
| Lecture | Pulse rate (beats per minute) during a lecture |

## Details

Ten students in an introductory statistics class measured their pulse rate (beats per minute) in two settings: first, in the middle of a regular class lecture and second, while taking an in-class quiz.

## Source

In-class data collection

RandomP50N200
Simulated proportions

## Description

Counts and proportions for 5000 simulated samples with $\mathrm{n}=200$ and $\mathrm{p}=0.50$

## Format

A dataset with 5000 observations on the following two variables

Count Number of simulated "yes" responses in 200 trials
Phat Sample proportion (Count/200)

## Details

Results from 5000 simulations of samples of size $n=200$ from a population with proportion of "yes" responses at $\mathrm{p}=0.50$.

## Source

Computer simulation

## RestaurantTips Restaurant Tips

## Description

Tip data from the First Crush Bistro

## Format

A dataset with 157 observations on the following 7 variables.
Bill Size of the bill (in dollars)
Tip Size of the tip (in dollars)
Credit Paid with a credit card? n or y
Guests Number of people in the group
Day Day of the week: m=Monday, $\mathrm{t}=$ Tuesday, $\mathrm{w}=$ Wednesday, $\mathrm{th}=$ Thursday, or $\mathrm{f}=$ Friday
Server Code for specfic waiter/waitress: A, B, or C
PctTip Tip as a percentage of the bill

## Details

The owner of a bistro called First Crush in Potsdam, NY was interested in studying the tipping patterns of his customers. He collected restaurant bills over a two week period that he believes provide a good sample of his customers. The data recorded from 157 bills include the amount of the bill, size of the tip, percentage tip, number of customers in the group, whether or not a credit card was used, day of the week, and a coded identity of the server.

## Source

Thanks to Tom DeRosa at First Crush for providing the tipping data.

RetailSales Retail Sales (2009-2019)

## Description

Monthly U.S. Retail Sales from 2009 to 2019

## Format

A data frame with 129 observations on the following 3 variables.

Month Month (Jan through Dec)
Year Years from 2009 to 2019
Sales Monthly U.S. retail sales (in billions of dollars)

## Details

Data show the monthly retail sales (in billions) for the U.S. economy in each month from January 2009 through September 2019.
** Updated for 3e (earlier versions are RetailSales2e and RetailSales1e). **

## Source

Data downloaded from http://www.census.gov/retail/.

## RockandRoll2019 <br> Rock \& Roll Hall of Fame (2019)

## Description

Groups and Individuals in the Rock and Roll Hall of Fame as of 2019

## Format

A data frame with 329 observations on the following 4 variables.
Inductee Name of the group or individual
FemaleMembers Yes if individual or member of the group is female, otherwise No
Category Type of individual or group: Early Influence, Lifetime Achievement, Non-performer, Performer, or Sideman

People Number of people in the group

## Details

All inductees of the Rock \& Roll Hall of Fame as of 2019.
** Updated for 3e (earlier versions are now RockandRoll2015 and RockandRoll1e) **

## Source

Rock \& Roll Hall of Fame website, http://rockhall.com/inductees/alphabetical/

## SalaryGender Salary and Gender

## Description

Salaries for college teachers

## Format

A dataset with 100 observations on the following 4 variables.

```
Salary Annual salary in $1,000's
Gender 0=female or 1=male
    Age Age in years
    PhD 1=have PhD or 0=no PhD
```


## Details

A random sample of college teachers taken from the 2010 American Community Survey (ACS) 1-year Public Use Microdata Sample (PUMS).

## Source

Downloaded from https://www.census.gov/programs-surveys/acs/data/pums.html
SampColleges Sample of US Post-secondary Schools

## Description

Information for a sample of 50 US post-secondary schools from the Department of Education's College Scorecard

## Format

A data frame with 50 observations on the following 37 variables.
Name Name of the school
State State where school is located
ID ID number for school
Main Main campus? ( $1=y e s, 0=$ branch campus)
Accred Accreditation agency
MainDegree Predominant undergrad degree ( $0=$ not classified, $1=$ certificate, $2=$ associate, $3=$ bachelors, $4=$ only graduate)

HighDegree Highest degree ( $0=$ no degrees, $1=$ certificate, $2=$ associate, $3=$ bachelors, $4=$ graduate $)$
Control Control of school (Private, Profit, Public)
Region Region of country (Midwest, Northeast, Southeast, Territory, West)
Locale Locale (City, Rural, Suburb, Town)
Latitude Latitude
Longitude Longitude
AdmitRate Admission rate
MidACT Median of ACT scores
AvgSAT Average combined SAT scores
Online Only online (distance) programs
Enrollment Undergraduate enrollment
White Percent of undergraduates who report being white

Black Percent of undergraduates who report being black
Hispanic Percent of undergraduates who report being Hispanic
Asian Percent of undergraduates who report being Asian
Other Percent of undergraduates who don't report one of the above
PartTime Percent of undergraduates who are part-time students
NetPrice Average net price (cost minus aid)
Cost Average total cost for tuition, room, board, etc.
TuitionIn In-state tuition and fees
TuitonOut Out-of-state tuition and fees
TuitionFTE Net Tuition revenue per FTE student
InstructFTE Instructional spending per FTE student
FacSalary Average monthly salary for full-time faculty
FullTimeFac Percent of faculty that are full-time
Pell Percent of students receiving Pell grants
CompRate Completion rate (percent who finish program within $150 \%$ of normal time)
Debt Average debt for students who complete program
Female Percent of female students
FirstGen Percent of first-generation students
MedIncome Median family income (in $\$ 1,000$ )

## Details

The US Department of Education maintains a database through its College Scorecard project of demographic information from all active postsecondary educational institutions that participate in Title IV. This dataset contains information from a sample of the 50 schools selected from CollegeScores.

## Source

Data downloaded from the US Department of Education's College Scorecard at https://collegescorecard. ed.gov/data/ (November 2019)
SampColleges2yr Sample of College Scorecard - Two Year

## Description

Information for a sample of 50 US post-secondary schools that primarily grant associate's degrees, from the Department of Education's College Scorecard

## Format

A data frame with 50 observations on the following 31 variables.
Name Name of the school
State State where school is located
ID ID number for school
Main Main campus? ( $1=$ yes, $0=$ branch campus)
Accred Accreditation agency
MainDegree Predominant undergrad degree ( $0=$ not classified, $1=$ certificate, $2=$ associate, $3=$ bachelors, $4=$ only graduate)
HighDegree Highest degree ( $0=$ no degrees, $1=$ certificate, $2=$ associate, $3=$ bachelors, $4=$ graduate )
Control Control of school (Private, Profit, Public)
Region Region of country (Midwest, Northeast, Southeast, Territory, West)
Locale Locale (City, Rural, Suburb, Town)
Enrollment Undergraduate enrollment
White Percent of undergraduates who report being white
Black Percent of undergraduates who report being black
Hispanic Percent of undergraduates who report being Hispanic
Asian Percent of undergraduates who report being Asian
Other Percent of undergraduates who don't report one of the above
PartTime Percent of undergraduates who are part-time students
NetPrice Average net price (cost minus aid)
Cost Average total cost for tuition, room, board, etc.
TuitionIn In-state tuition and fees
TuitonOut Out-of-state tuition and fees
TuitionFTE Net Tuition revenue per FTE student
InstructFTE Instructional spending per FTE student
FacSalary Average monthly salary for full-time faculty
FullTimeFac Percent of faculty that are full-time
Pell Percent of students receiving Pell grants
CompRate Completion rate (percent who finish program within $150 \%$ of normal time)
Debt Average debt for students who complete program
Female Percent of female students
FirstGen Percent of first-generation students
MedIncome Median family income (in $\$ 1,000$ )

## Details

Details The US Department of Education maintains a database through its College Scorecard project of demographic information from all active postsecondary educational institutions that participate in Title IV. This dataset contains information from a sample of the two-year colleges selected from all two-year colleges in ColleeScores2yr.

## Source

Data downloaded from the US Department of Education's College Scorecard at https: //collegescorecard. ed.gov/data/ (November 2019)

SampColleges4yr Sample of College Scorecard - Four Year

## Description

Information on a sample of 50 US four-year colleges and universities from the Department of Education's College Scoreboard

## Format

A data frame with 50 observations on the following 37 variables.
Name Name of the school
State State where school is located
ID ID number for school
Main Main campus? ( $1=$ yes, $0=$ branch campus)
Accred Accreditation agency
MainDegree Predominant undergrad degree (3=bachelors)
HighDegree Highest degree ( $0=$ no degrees, $1=$ certificate, $2=$ associate, $3=$ bachelors, $4=$ graduate )
Control Control of school (Private, Profit, Public)
Region Region of country (Midwest, Northeast, Southeast, Territory, West)
Locale Locale (City, Rural, Suburb, Town)
Latitude Latitude
Longitude Longitude
AdmitRate Admission rate
MidACT Median of ACT scores
AvgSAT Average combined SAT scores
Online Only online (distance) programs
Enrollment Undergraduate enrollment
White Percent of undergraduates who report being white
Black Percent of undergraduates who report being black
Hispanic Percent of undergraduates who report being Hispanic
Asian Percent of undergraduates who report being Asian
Other Percent of undergraduates who don't report one of the above
PartTime Percent of undergraduates who are part-time students
NetPrice Average net price (cost minus aid)
Cost Average total cost for tuition, room, board, etc.
TuitionIn In-state tuition and fees
TuitonOut Out-of-state tuition and fees
TuitionFTE Net Tuition revenue per FTE student
InstructFTE Instructional spending per FTE student
FacSalary Average monthly salary for full-time faculty

FullTimeFac Percent of faculty that are full-time
Pell Percent of students receiving Pell grants
CompRate Completion rate (percent who finish program within $150 \%$ of normal time)
Debt Average debt for students who complete program
Female Percent of female students
FirstGen Percent of first-generation students
MedIncome Median family income (in $\$ 1,000$ )

## Details

The US Department of Education maintains a database through its College Scorecard project of demographic information from all active postsecondary educational institutions that participate in Title IV. This dataset contains information from a sample of the four-year colleges and universities selected from all four-year colleges in CollegeScores4yr.

## Source

Data downloaded from the US Department of Education's College Scorecard at https: //collegescorecard. ed.gov/data/ (November 2019)

## SampCountries Sample of Countries

## Description

Data on a sample of fifty countries of the world (2018)

## Format

A data frame with 50 observations on the following 25 variables.
Country Country name
LandArea Size in 1000 sq. km.
Population Population in millions
Density Number of people per square kilometer
GDP Gross Domestic Product (in \$US) per capita
Rural Percentage of population living in rural areas
C02 CO2 emissions (metric tons per capita)
PumpPrice Price for a liter of gasoline (\$US)
Military Percentage of government expenditures directed toward the military
Health Percentage of government expenditures directed towards healthcare
ArmedForces Number of active duty military personnel (in 1,000 's)
Internet Percentage of the population with access to the internet
Cell Cell phone subscriptions (per 100 people)
HIV Percentage of the population with HIV
Hunger Percent of the population considered undernourished

Diabetes Percent of the population diagnosed with diabetes
BirthRate Births per 1000 people
DeathRate Deaths per 1000 people
ElderlyPop Percentage of the population at least 65 years old
LifeExpectancy Average life expectancy (years)
FemaleLabor Percent of females 15-64 in the labor force
Unemployment Percent of labor force unemployed
EnergyUse Kilotons of oil equivalent
Electricity Electric power consumption (kWh per capita)
Developed Categories for kilowatt hours per capita, $1=$ under 2500, $2=2500$ to $5000,3=$ over 5000

## Details

Data from AllCountries for a random sample of 50 countries. Data for 2016-2018 to avoid many missing values in more recent years.
** Updated for 3 e (earler versions are now SampCountries2e and SampCountries1e). **

## Source

Data collected from the World Bank website, http://www.worldbank.org.
SandP500 S\&P 500 Prices

## Description

Daily data for S\&P 500 Stock Index

## Format

A data frame with 251 observations on the following 6 variables.
Date Trading date (mm/dd/yyy)
Open Opening value
High High point for the day
Low Low point for the day
Close Closing value
Volume Shares traded (in millions)

## Details

Daily prices for the S\&P 500 Stock Index for trading days in 2018.
** Updated for 3 e (earlier versions are SandP5002e from 2014 and SandP5001e from 2010). **

## Source

Downloaded from http://finance.yahoo.com/q/hp?s=^GSPC+Historical+Prices

SandwichAnts Sandwich Ants

## Description

Ant counts on samples of different sandwiches

## Format

A dataset with 24 observations on the following 5 variables.
Butter Butter on the sandwich? no (Cases with Butter=yes are in SandwichAnts2) Filling Type of filling: Ham \& Pickles, Peanut Butter, or Vegemite

Bread Type of bread: Multigrain, Rye, White, or Wholemeal
Ants Number of ants on the sandwich
Order Trial number

## Details

As young students, Dominic Kelly and his friends enjoyed watching ants gather on pieces of sandwiches. Later, as a university student, Dominic decided to study this with a more formal experiment. He chose three types of sandwich fillings (vegemite, peanut butter, and ham \& pickles), four types of bread (multigrain, rye, white, and wholemeal), and put butter on some of the sandwiches. To conduct the experiment he randomly chose a sandwich, broke off a piece, and left it on the ground near an ant hill. After several minutes he placed a jar over the sandwich bit and counted the number of ants. He repeated the process, allowing time for ants to return to the hill after each trial, until he had two samples for each combination of the factors.
This dataset has only sandwiches with no butter. The data in SandwichAnts2 adds information for samples with butter.

## Source

Margaret Mackisack, "Favourite Experiments: An Addendum to What is the Use of Experiments Conducted by Statistics Students?", Journal of Statistics Education (1994)
http://www.amstat.org/publications/jse/v2n1/mackisack.supp.html

## Description

Ant counts on samples of different sandwiches

## Format

A dataset with 48 observations on the following 5 variables.
Butter Butter on the sandwich? no or yes
Filling Type of filling: Ham \& Pickles, Peanut Butter, or Vegemite

$$
\begin{aligned}
\text { Bread } & \text { Type of bread: Multigrain, Rye, White, or Wholemeal } \\
\text { Ants } & \text { Number of ants on the sandwich } \\
\text { Order } & \text { Trial number }
\end{aligned}
$$

## Details

As young students, Dominic Kelly and his friends enjoyed watching ants gather on pieces of sandwiches. Later, as a university student, Dominic decided to study this with a more formal experiment. He chose three types of sandwich fillings (vegemite, peanut butter, and ham \& pickles), four types of bread (multigrain, rye, white, and wholemeal), and put butter on some of the sandwiches.
To conduct the experiment he randomly chose a sandwich, broke off a piece, and left it on the ground near an ant hill. After several minutes he placed a jar over the sandwich bit and counted the number of ants. He repeated the process, allowing time for ants to return to the hill after each trial, until he had two samples for each combination of the three factors.

## Source

Margaret Mackisack, "Favourite Experiments: An Addendum to What is the Use of Experiments Conducted by Statistics Students?", Journal of Statistics Education (1994)
http://www.amstat.org/publications/jse/v2n1/mackisack.supp.html

## SkateboardPrices Skateboard Prices

## Description

Prices of skateboards for sale online

## Format

A dataset with 20 observations on the following variable.

> Price Selling price in dollars

## Details

Prices for skateboards offered for sale on eBay.

## Source

Random sample taken from all skateboards available for sale on eBay on February 12, 2012.
SleepCaffeine Sleep Caffeine

## Description

Experiment to compare word recall after sleep or caffeine

## Format

A dataset with 24 observations on the following 2 variables.

| Group | Treatment: Caffeine or Sleep |
| :--- | :--- |
| Words | Number of words recalled |

## Details

A random sample of 24 adults were divided equally into two groups and given a list of 24 words to memorize. During a break, one group takes a 90 minute nap while another group is given a caffeine pill. The response variable is the number of words participants are able to recall following the break.

## Source

Mednick, Cai, Kanady, and Drummond, "Comparing the benefits of caffeine, naps and placebo on verbal, motor and perceptual memory", Behavioural Brain Research, 193 (2008), 79-86.

```
SleepStudy Sleep Study
```


## Description

Data from a study of sleep patterns for college students.

## Format

A dataset with 253 observations on the following 27 variables.

| Gender | 1=male, 0=female |
| ---: | :--- |
| ClassYear | Year in school, 1=first year, ..., 4=senior |
| LarkOwl | Early riser or night owl? Lark, Nei ther, or Owl |
| NumEarlyClass | Number of classes per week before 9 am |
| EarlyClass | Indicator for any early classes |
| GPA | Grade point average (0-4 scale) |
| ClassesMissed | Number of classes missed in a semester |
| CognitionZscore | Z-score on a test of cognitive skills |
| PoorSleepQuality | Measure of sleep quality (higher values are poorer sleep) |
| DepressionScore | Measure of degree of depression |
| AnxietyScore | Measure of amount of anxiety |
| StressScore | Measure of amount of stress |
| DepressionStatus | Coded depression score: normal, moderate, or severe |
| AnxietyStatus | Coded anxiety score: normal, moderate, or severe |
| Stress | Coded stress score: normal or high |
| DASScore | Combined score for depression, anxiety and stress |
| Happiness | Measure of degree of happiness |
| AlcoholUse | Self-reported: Abstain, Light, Moderate, or Heavy |
| Drinks | Number of alcoholic drinks per week |
| WeekdayBed | Average weekday bedtime (24.0=midnight) |
| WeekdayRise | Average weekday rise time ( $8.0=8$ am) |


| WeekdaySleep | Average hours of sleep on weekdays |
| ---: | :--- |
| WeekendBed | Average weekend bedtime $(24.0=$ midnight $)$ |
| WeekendRise | Average weekend rise time $(8.0=8 \mathrm{am})$ |
| WeekendSleep | Average weekend bedtime $(24.0=$ midnight $)$ |
| AverageSleep | Average hours of sleep for all days |
| AllNighter | Had an all-nighter this semester? $1=y e s, 0=$ no |

## Details

The data were obtained from a sample of students who did skills tests to measure cognitive function, completed a survey that asked many questions about attitudes and habits, and kept a sleep diary to record time and quality of sleep over a two week period.

## Source

Onyper, S., Thacher, P., Gilbert, J., Gradess, S., "Class Start Times, Sleep, and Academic Performance in College: A Path Analysis," April 2012; 29(3): 318-335. Thanks to the authors for supplying the data.
Smiles Smiles

## Description

Experiment to study effect of smiling on leniency in judicial matters

## Format

A dataset with 68 observations on the following 2 variables.
Leniency Score assigned by a judgment panel (higher is more lenient)
Group Treatment group: neutral or smile

## Details

Hecht and LeFrance conducted a study examining the effect of a smile on the leniency of disciplinary action for wrongdoers. Participants in the experiment took on the role of members of a college disciplinary panel judging students accused of cheating. For each suspect, along with a description of the offense, a picture was provided with either a smile or neutral facial expression. A leniency score was calculated based on the disciplinary decisions made by the participants.

## Source

LaFrance, M., \& Hecht, M. A., "Why smiles generate leniency", Personality and Social Psychology Bulletin, 21, 1995, 207-214.

```
SpeedDating Speed Dating
```


## Description

Data from a sample of four minute speed dates.

## Format

A dataset with 276 observations on the following 22 variables.

```
            DecisionM Would the male like another date? 1=yes 0=no
            DecisionF Would the female like another date? 1=yes 0=no
                        LikeM How much the male likes his partner (1-10 scale)
                        LikeF How much the female likes her partner (1-10 scale)
            PartnerYesM Male's estimate of chance the female wants another date (1-10 scale)
            PartnerYesF Female's estimate of chance the male wants another date (1-10 scale)
                    AgeM Male's age (in years)
                    AgeF Females age (in years)
                    RaceM Male's race: Asian Black Caucasian Latino Other
                    RaceF Female's race: Asian Black Caucasian Latino Other
                AttractiveM Male's rating of female's attractiveness (1-10 scale)
                AttractiveF Female's rating of male's attractiveness (1-10 scale)
                    SincereM Male's rating of female's sincerity (1-10 scale)
                    SincereF Female's rating of male's sincerity (1-10 scale)
IntelligentM Male's rating of female's intelligence (1-10 scale)
IntelligentF Female's rating of male's intelligence (1-10 scale)
                    FunM Male's rating of female as fun (1-10 scale)
                    FunF Female's rating of male as fun (1-10 scale)
                    AmbitiousM Male's rating of female's ambition (1-10 scale)
                    AmbitiousF Female's rating of male's ambition (1-10 scale)
                            SharedInterestsM Male's rating of female's shared interests (1-10 scale)
                            SharedInterestsF Female's rating of male's shared interests (1-10 scale)
```


## Details

Participants were students at Columbia's graduate and professional schools, recruited by mass email, posted fliers, and fliers handed out by research assistants. Each participant attended one speed dating session, in which they met with each participant of the opposite sex for four minutes. Order and session assignments were randomly determined. After each four minute "speed date," participants filled out a form rating their date on a scale of 1-10 on various attributes. Only data from the first date in each session is recorded here.

## Source

Gelman, A. and Hill, J., Data analysis using regression and multilevel/hierarchical models, Cambridge University Press: New York, 2007

## SplitBill Split Bill vs Individual Meal Costs

## Description

Meal costs when ordering individually vs splitting a bill

## Format

A dataset with 48 observations on the following 4 variables.

$$
\begin{aligned}
\text { Payment } & \text { Payment method: Individual or Split } \\
\text { Sex } & \mathrm{F}=\text { female or } M \text { = male } \\
\text { Items } & \text { Number of items ordered } \\
\text { Cost } & \text { Cost of items ordered in Israeli new shekel's (ILS) }
\end{aligned}
$$

## Details

Subjects were 48 Israeli students who were randomly assigned to eat in groups of six (three males and three females) at a restaurant. Half the groups were told that they would pay for meals individually and half were told that the group would split the bill equally. The number of items ordered and cost (in Israeli new shekels) was recorded for each individual.

## Source

Gneezy, U.,Haruvy, E., and Yafe, H. "The Inefficiency of Splitting the Bill,"" The Economic Journal, 2004; 114, 265-280.

## StatGrades Statistics Exam Grades

## Description

Grades on statistics exams

## Format

A dataset with 50 observations on the following 3 variables.
Exam1 Score (out of 100 points) on the first exam
Exam2 Score (out of 100 points) on the second exam
Final Score (out of 100 points) on the final exam

## Details

Exam scores for a sample of students who completed a course using Statistics: Unlocking the Power of Data as a text. The dataset contains scores on Exam1 (Chapters 1 to 4), Exam2 (Chapters 5 to 8), and the Final exam (entire book).

## Source

Random selection of students in an introductory statistics course.

## StockChanges Stock Changes

## Description

Stock price change for a sample of stocks from the S\&P 500 (August 2-6, 2010)

## Format

A dataset with 50 observations on the following variable.
SPChange Change in stock price (in dollars)

## Details

A random sample of 50 companies from Standard \& Poor's index of 500 companies was selected. The change in the price of the stock (in dollars) over the 5-day period from August 2-6,2010 was recorded for each company in the sample.

## Source

Data obtained from http://money.cnn.com/data/markets/sandp/

```
StorySpoilers Story Spoilers
```


## Description

Ratings for stories with and without spoilers

## Format

A dataset with 12 observations on the following 3 variables.
Story ID for story
Spoiler Average (0-10) rating for spoiler version
Original Average (0-10) rating for original version

## Details

This study investigated whether a story spoiler that gives away the ending early diminishes suspense and hurts enjoyment. For twelve different short stories, the study's authors created a second version in which a spoiler paragraph at the beginning discussed the story and revealed the outcome. Each version of the twelve stories was read by at least 30 people and rated on a 1 to 10 scale to create an
overall rating for the story, with higher ratings indicating greater enjoyment of the story. Stories 1 to 4 were ironic twist stories, stories 5 to 8 were mysteries, and stories 9 to 12 were literary stories.

## Source

Leavitt, J. and Christenfeld, N., "Story Spoilers Don’t Spoil Stories," Psychological Science, published OnlineFirst, August 12, 2011.

```
StressedMice Stressed Mice
```


## Description

Time in darkness for mice in different environments

## Format

A dataset with 14 observations on the following 2 variables.

```
    Time Time spent in darkness (in seconds)
Environment Type of environment: Enriched or Standard
```


## Details

In the study, mice were randomly assigned to either an enriched environment where there was an exercise wheel available, or a standard environment with no exercise options. After three weeks in the specified environment, for five minutes a day for two weeks, the mice were each exposed to a "mouse bully" - a mouse who was very strong, aggressive, and territorial. One measure of mouse anxiety is amount of time hiding in a dark compartment, with mice who are more anxious spending more time in darkness. The amount of time spent in darkness is recorded for each of the mice.

## Source

Data approximated from summary statistics in: Lehmann and Herkenham, "Environmental Enrichment Confers Stress Resiliency to Social Defeat through an Infralimbic Cortex-Dependent Neuroanatomical Pathway", The Journal of Neuroscience, April 20, 2011, 31(16):61596173.

## StudentSurvey Student Survey Data

## Description

Data from a survey of students in introductory statistics courses

## Format

A data frame with 362 observations on the following 17 variables.
Year Year in school

```
Sex code F=female or M=male
Smoke Smoker? No or Yes
Award Preferred award: Academy, Nobel, or Olympic
HigherSAT Which SAT is higher? Math or Verbal
Exercise Hours of exercise per week
TV Hours of TV viewing per week
Height Height (in inches)
Weight Weight (in pounds)
Siblings Number of siblings
BirthOrder Birth order, 1=oldest
VerbalSAT Verbal SAT score
MathSAT Math SAT scorer
SAT Combined Verbal + Math SAT
GPA College grade point average
Pulse Pulse rate (beats per minute)
Piercings Number of body piercings
```


## Details

Data from an in-class survey given to introductory statistics students over several years. Note the Sex variable was labeled as Gender in earlier versions of this dataset. We acknowledge that this binary dichotomization is not a complete or inclusive representation of reality.

## Source

In-class student survey

## SynchronizedMovement Synchronized Movement

## Description

Effects of synchronized movement activities

## Format

A dataset with 264 observations on the following 11 variables.

| Sex | $f=$ female or m = male |
| ---: | :--- |
| Group | Type of activity. Coded as HS+HE, HS+LE, LS+HE, or LS+LE |
|  | for High/Low Synchronizaton + High/Low Exertion |
| Synch | Synchronized activity? yes or no |
| Exertion | Exertion level: high or low |
| nceBefore | Measure of pain tolerance ( mm Hg ) before activity |
| Tolerance | Measure of pain tolerance ( mm Hg ) after activity |
| inTolDiff | Difference (after - before) in pain tolerance |
| xPressure | Reached the maximum pressure (300 mm Hg) when testing pain tolerance (after) |
| oseBefore | Rating of closeness to the group before activity (1=least close to 7=most close) |
| loseAfter | Rating of closeness to the group after activity (1=least close to 7=most close) |
| CloseDiff | Change on closeness rating (after - before) |

## Details

From a study of 264 high school students in Brazil to examine the effect of doing synchronized movements (such as marching in step or doing synchronized dance steps) and the effect of exertion on variables, such as pain tolerance and attitudes towards others. Students were randomly assigned to activities that involved synchronized or non-synchronized movements involving high or low levels of exertion. Pain tolerance was measured with a blood pressure cuff, going to a maximum possible reading of 300 mmHg .

## Source

Tarr B, Launay J, Cohen E, and Dunbar R, "Synchrony and exertion during dance independently raise pain threshold and encourage social bonding," Biology Letters, 11(10), October 2015.

## TenCountries Ten Countries

## Description

A subset of the AllCountries data for a random sample of ten countries

## Format

A data frame with 10 observations on the following 4 variables.
Country Country name
Code Three-letter country code
Area Size in 1000 sq. kilometers
PctRural Percentage of population living in rural areas

## Details

Area and percent rural for a sample of ten countries from AllCountries dataset.
** Updated for 3e (earlier versions are now TenCountries2e and TenCountries1e) **

## Source

Data collected from the World Bank website, http://www.worldbank.org
TextbookCosts Textbook Costs

## Description

Prices for textbooks for different courses

## Format

A data frame with 40 observations on the following 3 variables.
Field General discipline of the course: Arts, Humanities, NaturalScience, or SocialScience
Books Number of books required
Cost Total cost (in dollars) for required books

## Details

Data are from samples of ten courses in each of four disciplines at a liberal arts college. For each course the bookstore's website lists the required texts(s) and costs. Data were collected for the Fall 2011 semester.

## Source

Bookstore online site

ToenailArsenic Toenail Arsenic

## Description

Arsenic in toenails of 19 people using private wells in New Hampshire

## Format

A dataset with 19 observations on the following variable.
Arsenic Level of arsenic found in toenails (ppm)

## Details

Level of arsenic was measured in toenails of 19 subjects from New Hampshire, all with private wells as their main water source.

## Source

Adapted from Karagas, et.al.,"Toenail Samples as an Indicator of Drinking Water Arsenic Exposure", Cancer Epidemiology, Biomarkers and Prevention 1996;5:849-852.
TrafficFlow Traffic Flow

## Description

Traffic flow times from a simulation with timed and flexible traffic lights

## Format

A dataset with 24 observations on the following 3 variables.

$$
\begin{aligned}
\text { Timed } & \text { Delay time (in minutes) for fixed timed lights } \\
\text { Flexible } & \text { Delay time (in minutes) for flexible communicating lights } \\
\text { Difference } & \text { Difference (Timed-Flexible) for each simulation }
\end{aligned}
$$

## Details

Engineers in Dresden, Germany were looking at ways to improve traffic flow by enabling traffic lights to communicate information about traffic flow with nearby traffic lights. The data show results of one experiment where they simulated buses moving along a street and recorded the delay time (in seconds) for both a fixed time and a flexible system of lights. The process was repeated under both conditions for a sample of 24 simulated scenarios.

## Source

Lammer and Helbing, "Self-Stabilizing decentralized signal control of realistic, saturated network traffic", Santa Fe Institute working paper <br>\# 10-09-019, September 2010.
USStates US State Data

## Description

Various data for all 50 US States.

## Format

A data frame with 50 observations on the following 22 variables.
State State name
HouseholdIncome Median household income (in \$1,000's)
Region MW=Midwest, NE=Northeast, $\mathrm{S}=$ South, $\mathrm{W}=$ West
Population Number of residents (in millions for 2014)
EighthGradeMath Average score NAEP mathematics for 8th-grade students
HighSchool \% of residents (ages 25-34) who are high school graduates
College \% of residents (ages 25-34) who are college graduates
IQ Estimated mean IQ score of residents
GSP Gross state product (in $\$ 1,000$ 's per capita)
Vegetables \% of residents eating vegetables at least once per day
Fruit \% of residents eating fruit at least once per day
Smokers \% of residents who smoke
PhysicalActivity \% who do 150+ minutes of aerobic physical activity per week
Obese \% obese residents (BMI 30+)
NonWhite \% nonwhite residents
HeavyDrinkers \% heavy drinkers ( men: 14+ drinks/week, women 7+ drinks/week)
Electoral Number of state votes in the presidential electoral college
ClintonVote Proportion of votes for Democrat Clinton in 2016 presidential election
Elect2016 State winner in 2016 presidential election ( $D=C l i n t o n, ~ R=T r u m p) ~$
TwoParents \% of children living in two-parent households
StudentSpending School spending (in $\$ 1,000$ per pupil)
Insured \% of adults (ages 19-64) who have any kind of health coverage

## Details

Information from each of the 50 states of the United States. Years vary from 2013 to 2018 depending on data availability. ** Updated for 3e (earlier versions are now USStates2e and USStates1e) **

## Source

U.S. Census Bureau, 2013-2017 5-Year American Community Survey
http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid= ACS_17_5YR_DP03\&src=pt
http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid= ACS_17_5YR_S1501\&src=pt
http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid= ACS_17_5YR_B02001\&prodType=table
http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml (Table C23008)
https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid= ACS_17_5YR_S2701\&prodType=table

## WaterStriders Water Striders

## Description

Mating activity for water striders

## Format

A dataset with 10 observations on the following 3 variables.

| AggressiveMale | Hyper-aggressive male in group? No or Yes |
| ---: | :--- |
| FemalesHiding | Proportion of time the female water striders were in hiding |
| MatingActivity | Measure of mean mating activity (higher numbers meaning more mating) |

## Details

Water striders are common bugs that skate across the surface of water. Water striders have different personalities and some of the males are hyper-aggressive, meaning they jump on and wrestle with any other water strider near them. Individually, because hyper-aggressive males are much more active, they tend to have better mating success than more inactive striders. This study examined the effect they have on a group. Four males and three females were put in each of ten pools of water. Half of the groups had a hyper-aggressive male as one of the males and half did not. The proportion of time females are in hiding was measured for each of the 10 groups, and a measure of mean mating activity was also measured with higher numbers meaning more mating.

## Source

Sih, A. and Watters, J., "The mix matters: behavioural types and group dynamics in water striders," Behaviour, 2005; 142(9-10): 1423.
WaterTaste WaterTaste

## Description

Blind taste test to compare brands of bottled water

## Format

A dataset with 100 observations on the following 10 variables.
Gender Gender of respondent: $\mathrm{F}=\mathrm{Female} \mathrm{M}=$ Male
Age Age (in years)
Class Year in school F=First year J=Junior 0=Other P SO=Sophomore SR=Senior
UsuallyDrink Usual source of drinking water: Bottled, Filtered, or Tap
FavBotWatBrand Favorite brand of bottled water
Preference Order of perference: $A=$ Sams Choice, $B=A q u a f i n a, C=F i j i$, and $D=T a p$ water
First Top choice among Aquafina, Fiji, SamsChoice, or Tap
Second Second choice
Third Third choice
Fourth Fourth choice

## Details

Result from a blind taste test comparing four different types of water (Sam's Choice, Aqufina, Fiji, and tap water). Participants rank ordered waters when presented in a random order.

## Source

"Water Taste Test Data" by M. Leigh Lunsford and Alix D. Dowling Finch in the Journal of Statistics Education (Vol 18, No, 1) 2010
http://www.amstat.org/publications/jse/v18n1/lunsford.pdf

## Wetsuits Wetsuits

## Description

Swim velocity (for 1500 meters) with and without wearing a wetsuit

## Format

A dataset with 12 observations on the following 4 variables.
Wetsuit Maximum swim velocity ( $\mathrm{m} / \mathrm{sec}$ ) when wearing a wetsuit

```
NoWetsuit Maximum swim velocity (m/sec) when wearing a regular bathing suit
    Gender Gender of swimmer: F or M
            Type Type of athlete: swimmer or triathlete
```


## Details

A study tested whether wearing wetsuits influences swimming velocity. Twelve competitive swimmers and triathletes swam 1500 m at maximum speed twice each; once wearing a wetsuit and once wearing a regular bathing suit. The order of the trials was randomized. Each time, the maximum velocity in meters/sec of the swimmer was recorded.

## Source

de Lucas, R.D., Balildan, P., Neiva, C.M., Greco, C.C., Denadai, B.S. (2000). "The effects of wetsuits on physiological and biomechanical indices during swimming," Journal of Science and Medicine in Sport, 3 (1): 1-8.

## YoungBlood Young Blood

## Description

Effects of transfusions of young blood on exercise endurance in mice

## Format

A dataset with 30 observations on the following 2 variables.
Plasma Whether the blood came from a Young or Old mouse
Runtime Maximum treadmill run time (in minutes) in a 90 -minute window

## Details

The data come from a study to see if transfusions of blood plasma from young mice (equivalent to about a 25 -year-old person) can counteract or reverse brain aging in old mice (equivalent to about a 70 -year-old person.) Old mice were randomly assigned to receive plasma from either a young mice or another old mouse, and exercise endurance was measured.

## Source

Data come from two references, and are estimated from summary statistics and graphs. Sanders L, "Young blood proven good for old brain,"" Science News, 185(11), May 31, 2014. Manisha S, et al., "Restoring Systemic GDF11 Levels Reverses Age-Related Dysfunction in Mouse Skeletal Muscle," Science, 9 May 2014.

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[^0]:    GSWarriors2019
    Golden State Warriors Basketball (2019)

