Package 'smdata'

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babies

Babies gaze data

Description

Gaze patterns of four babies in a group.

Usage

data("babies")

Format

A data frame with 1180 observations on the following 6 variables.

row a numeric vector

time a numeric vector indexing the target baby

id a numeric vector indexing the observations

gaze a factor indicating whether a baby was looked at, with levels no yes

- babies a factor indexing which baby was chosen to be looked at with levels baby1 baby2 baby3 baby4
- lookedat a numeric vector registering whether gaze was initiated by the target baby, with levels 0 indicating "no" and 1 indicating "yes"

Source

These are hypothetical data.

Examples

data("babies", package="smdata")

carsales

Description

Replication of the car salesperson problem in See, Fox, and Rottenstreich (2006)

Usage

```
data("carsales")
```

Format

A data frame with 155 observations on the following 4 variables.

- initial a numeric vector taking the value 0 for the Car condition and 1 for the Salesperson condition
- prob a numeric vector recording the respondent's probability estimate that the car was purchased from Carlos
- NFCC a numeric vector recording respondents' scores on the Need for Certainty and Closure scale
- ctrNFCC a numeric vector that is NFCC standardized to have a mean of 0 and standard deviation of 1

Source

Data provided by Gurr, M. (2009).

References

Gurr, M. (2009). Partition dependence: Investigating the principle of insufficient reason, uncertainty and dispositional predictors. (Unpublished Honours thesis: The Australian National University, Canberra, Australia)

See, K. E., Fox, C. R., & Rottenstreich, Y. S. (2006). Between ignorance and truth: Partition dependence and learning in judgment under uncertainty. *Journal of Experimental Psychology*, 32, 1385-1402.

Examples

data("carsales", package="smdata")

cocaine

Description

Data from the 1991-1994 Drug Abuse Treatment Outcome Study on cocaine usage patterns.

Usage

```
data("cocaine")
```

Format

A data frame with 7592 observations on the following 2 variables.

sex a factor with levels female male

mode a factor recording self-reported method of cocaine ingestion with levels crack freebase inhale inject

Source

The data are extracted from the 1991-1994 Drug Abuse Treatment Outcome Study (2010) data (DATOS).

References

United States Department of Health and Human Services and National Institute of Health and National Institute on Drug Abuse (2010). *Drug Abuse Treatment Outcome Study*, 1991-1994. Ann Arbor, MI: Inter-university Consortium for Political and Social Research.

Examples

data("cocaine", package="smdata")

Description

Data from the 1991-1994 Drug Abuse Treatment Outcome Study on cocaine usage patterns.

Usage

data("cocaineplus")

dass

Format

A data frame with 7592 observations on the following 8 variables.

sexsrt a factor with levels FEMALE MALE

age a numeric vector

mstatstr a factor with levels BLANK DIVORCED LIVINGASMARRIED MARRIED NEVERMARRIED SEPARATED WIDOWED

modestr a factor with levels crack freebase inhale inject

racestr a factor with levels AfroAmerican Caucasian Hispanic Other

sex a numeric vector that takes the value 1 if male and 0 if female

- mode a numeric vector that takes the value 1 if cocaine usage method is crack, 2 if method is freebase, 3 if method is inhale, and 4 if method is inject
- race a numeric vector that takes the value 1 if AfroAmerican, 2 if Caucasian, 3 if Hispanic, and 4 if Other

Source

The data were extracted from the 1991-1994 Drug Abuse Treatment Outcome Study (2010) data (DATOS).

References

United States Department of Health and Human Services and National Institute of Health and National Institute on Drug Abuse (2010). *Drug Abuse Treatment Outcome Study*, 1991-1994. Ann Arbor, MI: Inter-university Consortium for Political and Social Research.

Examples

data("cocaineplus", package="smdata")

dass

Depression, Anxieity, and Stress

Description

Depression, Anxieity, and Stress Scale Data.

Usage

data("dass")

Format

A data frame with 166 observations on the following 3 variables.

depress a numeric vector measuring depression, scored from 0 to 20

anxiety a numeric vector measuring anxiety, scored from $0\ {\rm to}\ 20$

stress a numeric vector measuring stress, scored from 0 to 20

Source

Data from a pilot study by Michael Smithson.

References

Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales with the Beck Depression and Anxiety Inventories. *Behavior Research and Therapy*, 33, 335-343.

Examples

data("dass", package="smdata")

dyslexic3

Dyslexic readers data

Description

Reading scores and nonverbal IQ scores for gender- and age-matched dyslexic and non-dyslexic readers.

Usage

data("dyslexic3")

Format

A data frame with 44 observations on the following 3 variables.

score a numeric vector recording childrens' scores on a reading accuracy test

- dys a numeric vector taking the value 1 if dyslexic and 0 if not
- ziq a numeric vector recording childrens' nonverbal IQ scores, standardized to have a mean of 0 and standard deviation of 1

Details

The reading accuracy scores have a maximum score of 1, indicating a perfect score on the test. In the Example 6.2 analysis, these are recoded to .99; whereas in the 1's inflated model in Ch. 6 and the censored regression model in Ch. 7 they have a value of 1.

email

Source

Data provided from Pammer and Kevan (2007), first analyzed in Smithson and Verkuilen (2006).

References

Pammer, K., & Kevan, A. (2007). The contribution of visual sensitivity, phonological processing, and nonverbal IQ to childrens reading. *Scientific Studies in Reading*, 11, 33-53.

Smithson, M. J., & Verkuilen, J. (2006). A better lemon squeezer? maximum likelihood regression with beta-distributed dependent variables. *Psychological Methods*, 11, 54-71.

Examples

data("dyslexic3", package="smdata")

email

Marital Status and Email Usage

Description

Data from the U.S. General Social Surveys on marital status (ordinal; see details) and email usage.

Usage

data("email")

Format

A data frame with 3967 observations on the following 3 variables.

marital Marital status, an ordered factor with levels never.married < married < divorced.

email.hrs Reported weekly hours spent emailing.

z.email Standardized version of email.hrs.

Details

In creation of this dataset, an additional GSS item (DIVORCE) was used to ensure that married people in the sample had not been previously divorced or widowed. Thus, the marital status variable in this dataset is truly ordinal, as individuals can only progress through the statuses in one order.

Source

The Survey Documentation and Analysis system hosted at UC, Berkeley: http://sda.berkeley.edu/GSS/.

References

Smith, T. W., Marsden, P. V., Hout, M., & Kim, J. (2011). *General Social Surveys*, 1972 - 2010. Principal Investigator, Tom W. Smith; Co-Principal-Investigators, Peter V. Marsden and Michael Hout, NORC ed. Chicago: National Opinion Research Center, producer, 2005; Storrs, CT: The Roper Center for Public Opinion Research, University of Connecticut, distributor. 1 data file (55,087 logical records) and 1 codebook (3,610 pp).

Examples

data("email", package="smdata")

euthan

Euthanasia Scale

Description

Euthanasia scale and Christian identification scale data.

Usage

data("euthan")

Format

A data frame with 351 observations on the following 3 variables.

- mident a numeric vector measuring the degree to which respondents identify themselves as Christian, on a scale from 0 to 1
- teuth a numeric vector measuring the degree to which respondents favor euthanasia, on a scale from 0 to 1

status a numeric vector taking the value 0 if the observation is censored and 1 if not

Source

Data obtained from Mavor's (2004) study.

References

Mavor, K. (2004). *Religious orientation, social identity and attitudes to homosexuality*. Unpublished doctoral dissertation, School of Psychology, The Australian National University, Canberra, A.C.T., Australia.

Examples

data("euthan", package="smdata")

exam

Description

Grades achieved by second-year psychology students at The Australian National University in an introductory research methods course and the percentage marks they received in the laboratory component of that course.

Usage

data("exam")

Format

A data frame with 154 observations on the following 3 variables.

Labs a numeric vector recording the percentage mark for the laboratory component of the course

Final a numeric vector recording the percentage mark for the final exam

cens a numeric vector taking the value 100 to indicate the value of censored observations

Source

Data obtained from Michael Smithson.

Examples

```
data("exam", package="smdata")
```

finance

Confidence in financial knowledge

Description

Choice and confidence data from a study of financial knowledge involving U.S. undergraduates.

Usage

data("finance")

Format

A data frame with 4230 observations on the following 11 variables.

sub Participant number.

jmeth Experimental condition, with levels 1cd 2ci 3ei (see details).

item Item number.

easyfoil Equals 1 if the foil (incorrect alternative) was easy, 0 if the foil was hard (see details).

targtop Equals 1 if the correct alternative was the first one displayed (on top), 0 otherwise.

cho Participant's choice (equals one for the first alternative, 0 for the second alternative).

corr Participant's accuracy (essentially targtop==cho).

iproba For conditions 2ci and 3ei, the participant's confidence in the first alternative.

iprobb For conditions 2ci and 3ei, the participant's confidence in the second alternative.

probe The participant's confidence in his/her choice (see details).

nchorev The number of choice revisions that the participant made.

Details

The data come from Study 2 of Sieck, Merkle, and Van Zandt (2007). Experimental participants completed a 30-item, 2-alternative test of financial knowledge. For each item, the participant first chose an alternative and then made a confidence judgment.

The confidence elicitation method varied across three between-subjects conditions. For condition 1cd, participants reported confidence in their chosen alternative on a scale from 50% to 100%. For conditions 2ci and 3ei, participants reported independent confidence judgments for each alternative on scales from 0% to 100%. These independent confidence judgments are contained in iproba and iprobb. In these conditions, probc is obtained by normalizing confidence in the chosen alternative by the sum of independent judgments.

In addition to reporting independent confidence judgments in condition 3ei, participants wrote an explanation in response to the question "Why is this option true?" prior to reporting each confidence judgment.

For each item, the incorrect alternative was manipulated to sometimes be easy (easyfoil==1) and sometimes be difficult (easyfoil==0). Foil difficulty was defined by the accuracy of an independent group of students on a four-alternative version of the financial knowledge test; see Sieck et al. for more detail.

Source

Provided by Ed Merkle.

References

Sieck, W.R., Merkle, E.C., & Van Zandt, T. (2007). Option fixation: A cognitive contributor to overconfidence. *Organizational Behavior and Human Decision Processes*, *103*, 68-83.

Examples

data("finance", package="smdata")

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fixations

Description

Summary eyetracking data from a study examining the impact of text saliency on eye movements.

Usage

data("fixations")

Format

A data frame with 48 observations on the following 6 variables.

id Participant ID label.

condition Condition, signifying whether a channel had a red title (see details).

countleft Count of fixations in the middle, left channel.

countright Count of fixations in the middle, right channel.

gazetime Total gaze time on the webpage.

rt.cond Equals red if the middle, right channel title was red; black otherwise.

Details

The data are taken from Owens, Shrestha, & Chaparro (2009). A webpage was divided into 9 channels (sections), and the title color of the "middle, left" and "middle, right" channels were manipulated.

The variable condition takes the value Control if all title colors were black; Left if the "middle, left" channel title was red; and Right if the "middle, right" channel title was red.

Source

Provided by Justin W. Owens.

References

Owens, J.W., Shrestha, S., & Chaparro, B.S. (2009). Effects of text saliency on eye movements while browsing a web portal. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 53, pp. 1257-1261).

Examples

data("fixations", package="smdata")

grades

Description

Lab percentage mark, letter grade, lower and upper grade thresholds, a censored variable value, and the final percentage course mark.

Usage

data("grades")

Format

A data frame with 165 observations on the following 6 variables.

lab a numeric vector recording the percentage mark for the laboratory component of the course gradecat a factor denoting the letter grade for the course, with levels CR D HD N P lower a numeric vector denoting the lower threshold for the corresponding letter grade upper a numeric vector denoting the upper threshold for the corresponding letter grade cens a numeric vector listing the censoring value of a mark, 3 finmark a numeric vector recording the final percentage mark for the course

Source

Data obtained from Michael Smithson.

Examples

```
data("grades", package="smdata")
```

guilt1

Study 1 judged probabilities of guilt

Description

Judged probabilities of guilt in a criminal trial scenario (Study 1).

Usage

data("guilt1")

guilt3

Format

A data frame with 104 observations on the following 7 variables.

observ a numeric vector indexing cases

- crguilt a numeric vector recording the judged probability of guilt in a criminal trial scenario
- cigult a numeric vector recording the judged probability of guilt in a civil trial scenario
- crvd1 a numeric vector taking the value 1 if the respondent returned a "guilty" verdict in the criminal trial and 0 otherwise
- crvd2 a numeric vector taking the value 1 if the respondent returned a "not guilty" verdict in the criminal trial and 0 otherwise
- civd1 a numeric vector taking the value 1 if the respondent returned a "guilty" verdict in the civil trial and 0 otherwise
- civd2 a numeric vectortaking the value 1 if the respondent returned a "not guilty" verdict in the civil trial and 0 otherwise

Source

Data provided from Study 1 of Smithson, Deady and Gracik (2007).

References

Smithson, M., Gracik, L., & Deady, S. (2007). Guilty, not guilty, or ?multiple verdict options in jury verdict choices. *Journal of Behavioral Decision Making*, 20, 481-498.

Examples

```
data("guilt1", package="smdata")
```

guilt3

Study 3 judged probabilities of guilt

Description

Judged probabilities of guilt in a criminal trial scenario (Study 3).

Usage

data("guilt3")

Format

A data frame with 96 observations on the following 3 variables.

pguilt a numeric vector recording the judged probability of guilt in a criminal trial scenario

- v1 a numeric vector taking the value 1 if the respondent returned a "guilty" verdict in the criminal trial and 0 otherwise
- v2 a numeric vector taking the value 1 if the respondent returned a 'not 'guilty" verdict in the criminal trial and 0 otherwise

Source

Data provided from Study 3 of Smithson, Deady and Gracik (2007).

References

Smithson, M., Gracik, L., & Deady, S. (2007). Guilty, not guilty, or ?multiple verdict options in jury verdict choices. *Journal of Behavioral Decision Making*, 20, 481-498.

Examples

```
data("guilt3", package="smdata")
```

intervalbeta Lower and upper probability estimates

Description

Lower and upper probability estimates provided by the Busdecu et al. (2009) respondents in their interpretations of the phrase "very likely" in an IPCC report statement, along with dummy variables indicating the experimental condition.

Usage

```
data("intervalbeta")
```

Format

A data frame with 220 observations on the following 5 variables.

- t a numeric vector taking the value 1 if the respondent is in the Translation condition, and 0 otherwise
- n a numeric vector taking the value 1 if the respondent is in the Narrow condition, and 0 otherwise
- w a numeric vector taking the value 1 if the respondent is in the Wide condition, and 0 otherwise
- y1 a numeric vector recording the respondent's lower probability estimate
- y2 a numeric vector recording the respondent's upper probability estimate

Source

Data provided by D. V. Budescu from the Budescu et al. (2009) study.

References

Budescu, D.V., Broomell, S., and Por,H.-H. (2009). Improving the communication of uncertainty in the reports of the Intergovernmental panel on climate change, *Psychological Science*, 20, 299-308.

Examples

data("intervalbeta", package="smdata")

phono

Description

Frequency with which respondents correctly identified 0, 1, 2, 3, or 4 letters (in correct versus incorrect order) of a word or non-word based on a cue.

Usage

data("phono")

Format

A data frame with 16 observations on the following 3 variables.

- treeid a numeric vector, a tree identification code needed by the R package for estimating MPT models
- resp a factor denoting whether a respondent correctly identified 0, 1, 2, 3, or 4 letters, with CO denoting the 4 letters were in the correct order and IO indicating that they were not, with levels 0L 1L 2L 3L 4LC0 4LI0
- fr a numeric vector recording the frequency of each response type

Source

These data are extracted from Maris (2002) figure 7, pg. 1421.

References

Maris, E. (2002). The role of orthographic and phonological codes in the word and the pseudoword superiority effect: An analysis by means of multinomial processing tree models. *Journal of Experimental Psychology: Human Perception and Performance*, 28, 1409-1431.

Examples

data("phono", package="smdata")

rtime

Description

Response times for a task timed-out at 1200 ms, and a prime (either respondents were primed to use intuition or deliberation in the task).

Usage

data("rtime")

Format

A data frame with 300 observations on the following 3 variables.

RT a numeric vector, response time in milliseconds

prime a numeric vector taking the value 0 if primed to use intuition or 1 if primed to use deliberation

status a numeric vector taking the value 0 if the observation is censored and 1 if not

Source

These are hypothetical data.

Examples

data("rtime", package="smdata")

skipping

School Skipping

Description

Data from the U.S. National Survey on Drug Use and Health on the frequency with which individuals skip school and other covariates.

Usage

data("skipping")

trchoice

Format

A data frame with 252 observations on the following 6 variables.

income Reported household income, where 1 means < \$20k; 2 means >= \$20k and < \$50k; 3 means >= \$50k and < \$75k; 4 means >= \$75k.

irsex Gender; 1 is male and 2 is female.

educatn2 Grade in school (see details).

schdskip Reported number of school days skipped out of the past 30.

wrkhrsw2 Reported number of hours worked in the past week.

anyskip A binary version of schdskip, signifying whether the respondent skipped any days of school out of the past 30.

Details

Variable names match those from the National Survey on Drug Use and Health, so more details can be obtained from the survey codebook. Missing data codes have been changed to NA. Additionally, the educatn2 has been recoded to generally match the actual grade in which the respondent is enrolled. The only exceptions to this are that 14 means the second and third years in college, and 15 means the fourth or higher year in college.

Source

Obtained from the Inter-University Consortium for Political and Social Research, University of Michigan, http://www.icpsr.umich.edu.

References

United States Department of Health and Human Services. Substance Abuse and Mental Health Services Administration. Center for Behavioral Health Statistics and Quality. National Survey on Drug Use and Health, 2010. ICPSR32722-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2011-12-05. doi:10.3886/ICPSR32722.v1

Examples

data("skipping", package="smdata")

trchoice

Transportation mode choice

Description

Choice of transportation mode by gender.

Usage

data("trchoice")

Format

A data frame with 10 observations on the following 4 variables.

treeid a numeric vector needed for identifying a tree in the MPT algorithm

sex a numeric vector taking the value 1 if male and 0 if female

- resp a factor denoting the transport mode choice, where D denotes driving one's own vehicle, F denotes getting a ride with a friend, O denotes other, P denotes using public transport, and W denotes walking
- fr a numeric vector recording the frequency with which each transport mode is chosen

Source

The data are extracted from the 1991-1994 Drug Abuse Treatment Outcome Study (2010) data (DATOS).

References

United States Department of Health and Human Services and National Institute of Health and National Institute on Drug Abuse (2010). *Drug Abuse Treatment Outcome Study*, 1991-1994. Ann Arbor, MI: Inter-university Consortium for Political and Social Research.

Examples

data("trchoice", package="smdata")

treatment

Chest Pain Treatment Preferences

Description

Experimental data in which participants were presented with statistical information about two treatments for chest pain, then asked about their preference for a treatment.

Usage

data("treatment")

Format

A data frame with 235 observations on the following 4 variables.

cond Condition, referring to the way that statistical information was presented (see details).

- choice Treatment preference on an ordinal, 6-level scale from "definitely angioplasty" to "definitely bypass".
- effectiveness Participant ratings of the importance of treatment effectiveness on treatment choice (1 is extremely unimportant; 6 is extremely important).
- invasiveness Participant ratings of the importance of treatment invasiveness on treatment choice (1 is extremely unimportant; 6 is extremely important).

trlong

Details

The data were taken from Hulsey (2010). Study participants were asked to make a hypothetical decision between two treatments for chest pain: bypass surgery or balloon angioplasty. Bypass is generally more effective, but it is also more invasive and has a longer recovery time.

Conditions were defined by the way participants received statistical information concerning the two treatments. In condition pictograph, participants viewed visual information via a pictograph. In condition statistics, participants view numerical information.

Source

Provided by Lukas Hulsey.

References

Hulsey, L. (2010). *Testimonials and statistics in patient medical decision aids*. Unpublished master's thesis, Wichita State University.

Examples

data("treatment", package="smdata")

trlong

Transportation mode choice, long format

Description

Choice of transportation mode by gender, in long format so that each choice occupies 5 rows.

Usage

```
data("trlong")
```

Format

A data frame with 31680 observations on the following 6 variables.

obs a numeric vector

case a numeric vector

sex a numeric vector, = 1 if male and 0 if female

- resp a factor indicating the transport mode choice, and B denotes taking the bus, codeD denotes driving one's own vehicle, F denotes getting a ride with a friend, O denotes other, and W denotes walking
- chosen a numeric vector taking the value 1 if the transport mode was chosen and 0 if not
- pubpriv a numeric vector that takes a value of 1 if the transportation mode is private and 0 if it is public

Source

The data are extracted from the 1991-1994 Drug Abuse Treatment Outcome Study (2010) data (DATOS).

References

United States Department of Health and Human Services and National Institute of Health and National Institute on Drug Abuse (2010). *Drug Abuse Treatment Outcome Study*, 1991-1994. Ann Arbor, MI: Inter-university Consortium for Political and Social Research.

Examples

data("trlong", package="smdata")

workdays

Work Days Missed

Description

Data from the U.S. National Survey on Drug Use and Health on the frequency with which individuals miss work due to mental health issues and other covariates.

Usage

data("workdays")

Format

A data frame with 777 observations on the following 8 variables.

cigtry Reported age that the respondent first smoked a cigarette.

impydays Reported days in the past year the respondent was unable to work due to mental health (see details).

age2 Respondent age (see details).

service Has the respondent been in the U.S. Armed Forces? (1=yes, 0=no)

health Rating of overall health, where 1 is excellent and 5 is poor.

movespy2 Number of times the respondent moved in the past 12 months.

schenrl Whether the respondent is enrolled in any school (1=yes, 0=no).

coutyp2 Type of county in which the respondent resides: large metro (large), small metro (small), nonmetro (nonmetro).

workdays

Details

Variable names match those from the National Survey on Drug Use and Health, so more details can be obtained from the survey codebook. Missing data codes have been changed to NA. Additionally, age2 is coded so that 7 means 18 years of age, 8 means 19 years of age, ..., 11 means 22 or 23 years of age, 12 means 24 or 25 years, 13 means 26-29, 14 means 30-34, 15 means 35-49, 16 means 50-64, and 17 means 65 and over.

The variable impydays contains responses to the question "About how many days out of 365 in the past 12 months were you totally unable to work or carry out your normal activities because of your emotions, nerves, or mental health?"

Source

Obtained from the Inter-University Consortium for Political and Social Research, University of Michigan, http://www.icpsr.umich.edu.

References

United States Department of Health and Human Services. Substance Abuse and Mental Health Services Administration. Center for Behavioral Health Statistics and Quality. National Survey on Drug Use and Health, 2010. ICPSR32722-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2011-12-05. doi:10.3886/ICPSR32722.v1

Examples

data("workdays", package="smdata")

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