Package 'sdamr'

September 29, 2021

Title Statistics: Data Analysis and Modelling

Version 0.1.0

Description Data sets and functions to support the books ``Statistics: Data
analysis and modelling'' by Speekenbrink, M. (2021)
<https://mspeekenbrink.github.io/sdam-book/> and ``An R companion to
Statistics: data analysis and modelling'' by Speekenbrink, M. (2021)
<https://mspeekenbrink.github.io/sdam-r-companion/>. All datasets
analysed in these books are provided in this package. In addition, the
package provides functions to compute sample statistics (variance,
standard deviation, mode), create raincloud and enhanced Q-Q plots, and
expand Anova results into omnibus tests and tests of individual
contrasts.

License GPL-3

Encoding UTF-8

Language en-GB

LazyData true

RoxygenNote 7.1.2

URL <https://mspeekenbrink.github.io/sdam-r/>

Depends R (>= 3.5.0)

Imports methods, stats, dplyr, ggplot2, grid, car

NeedsCompilation no

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R topics documented:

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anchoring   *Anchoring*

Description

Numerical judgments of the height of the Mount Everest after a low or high anchor. This dataset comes from the ManyLabs 1 study

Usage

```
anchoring
```

Format

A data frame with 4632 rows and 5 variables:

session_id Unique identifier for participants

sex Sex of participant (f = female, m = male)

age Age of participant in years

citizenship Country code of citizenship

referrer Location of data collection. Site abbreviations used here can be matched up to the full site name in the online supplement <https://osf.io/wx7ck/>

us_or_international Was the study conducted on a US sample or international sample?

lab_or_online Was the study conducted online or in-lab?

anchor anchor, whether high or low

everest_feet judged height of Mount Everest in feet. Converted from meters if given in meters.

everest_meters judged height of Mount Everest in meters. Only contains values when judgment was actually given in meters.

Source

<https://osf.io/pqf9r/>. See also Klein, R. A., Ratliff, K. A., Vianello, M., Adams, R. B., Jr., Bahník, Š., Bernstein, M. J., . . ., Nosek, B. A. (2014). Investigating variation in replicability: A "many labs" replication project. Social Psychology, 45(3), 142-152. doi: [10.1027/18649335/a000178](#)

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center *Mean-centered values*

Description

center computes mean-centered values. It is a convenience wrapper to scale, equal to scale(x, scale=FALSE)

Usage

```
center(x)
```

Arguments

x   Numeric vector

Value

A numeric vector with mean-centered values

Examples

```
data(anchoring)
center(anchoring$everest_feet)
```

cheerleader	*Data from Experiment 1 of Carragher, D.J., Thomas, N.A., Gwinn, O.S. et al. (2019) Limited evidence of hierarchical encoding in the cheerleader effect. Scientific Reports, 9, 9329. https://doi.org/10.1038/s41598-019-45789-6*

Description

\@format A data frame with 320 observations of 16 variables:

Participant (factor) Participant ID

Age (numeric) Participant age in years

Sex (factor) Participant sex (Male or Female)

Task (factor) Identical-Distractors, or Self-Distractors.

LineClickAccuracy Measure of average response deviation from the visual analogue scale; scores > +/- 2.00 constitute exclusion.

Excluded (numeric) Indicator whether participant was excluded from main analysis (0 = no, 1 = yes)

WhyExcluded (character) explanation for exclusion

Item (factor) Item description

Response Attractiveness rating for the target face on a visual analogue scale ranging from "Very Unattractive" (0) to "Very Attractive" (100)

Usage

```
cheerleader
```

Format

An object of class data.frame with 192 rows and 9 columns.

Source

https://osf.io/je5u7/. Carragher, D.J., Thomas, N.A., Gwinn, O.S. et al. (2019) Limited evidence of hierarchical encoding in the cheerleader effect. Scientific Reports, 9, 9329 doi: 10.1038/ s41598019457896.

expand_Anova	*Expand all contrast terms in car::Anova*

Description

expand_Anova is an experimental function to add more detailed results to those returned by car::Anova. In particular, expand_Anova aims to provide test results for all individual contrasts assigned to the factors in a linear model, in addition to the omnibus tests returned by car::Anova.

Usage

```
expand_Anova(mod, type = c("III", "II", 3, 2), ...)
```

Arguments

mod	A model of class lm (see ?stats::lm)
type	SS Type (see ?car::Anova)
...	Further arguments passed to Anova

Details

This is an experimental function

Value

Object of class anova returned by car::Anova

See Also

[car::Anova()](#) for more information about the Anova tables, and [stats::lm()](#) for information about how to specify the model

Examples

```
data("tetris2015")
mod <- lm(Days_One_to_Seven_Number_of_Intrusions ~ Condition, data=tetris2015)
car::Anova(mod,type=3) # default type III Anova table
expand_Anova(mod,type=3)
```

| expBelief | *Data from Experiment 5 of Gilder, T. S. E., & Heerey, E. A. (2018). The Role of Experimenter Belief in Social Priming. Psychological Science, 29(3), 403–417.* |

Description

\@format A data frame with 400 observations of 16 variables:

pid Participant ID

exptrNum Experimenter Number

age Participant age in years

gender Participant self-reported gender

yearInUni Year in University

ethnicity Self-reported ethnicity

englishFluency Self-reported English fluency (1=beginner; 7=native language)

experimenterBelief Experimenter Belief (H: High or L: Low)

primeCond Actual Prime Condition (HPP: High-power prime or LPP: low-power prime)

powerPRE Self-reported power BEFORE the manipulation

powerPOST Self-reported power AFTER the manipulation

ApproachAdvantage Approach advantage (Avoid RT - Approach RT; see manuscript)

attractive Rating of experimenter ATTRACTIVENESS

competent Rating of experimenter COMPETENCE

friendly Rating of experimenter FRIENDLINESS

trustworthy Rating of experimenter TRUSTWORTHINESS

Usage

```
expBelief
```

Format

An object of class data.frame with 400 rows and 16 columns.

Source

https://osf.io/un4h6/. See also Gilder, T. S. E., & Heerey, E. A. (2018). The Role of Experimenter Belief in Social Priming. Psychological Science, 29(3), 403–417. doi: 10.1177/0956797617737128.

| fifa2010 | *Predictions by Paul the Octopus in the 2010 FIFA World Cup.* |

Description

A dataset containing the predictions and outcomes of matches in the 2010 FIFA European Cup.

Usage

```
fifa2010
```

Format

A data frame with 8 rows and 4 variables:

Match countries playing

Prediction country predicted to win

Result score at the end of the match

Outcome whether Paul was correct or incorrect

Source

https://en.wikipedia.org/wiki/Paul_the_Octopus

| fifa2010teams | *FIFA 2010 team statistics* |

Description

Statistics for all teams playing in the 2010 FIFA world cup.

Usage

```
fifa2010teams
```

Format

A data frame with 11 variables and 32 rows

nr Unique numeric identifier for each team

team Name of the team (i.e. country)

matches_played Number of matches played

goals_for Total goals counted against their opponents

goals_scored Total goals scored against their opponents

goals_against Goals counted against the team

penalty_goal Number of penalty goals scored

own_goals_for Number of own goals

yellow_cards Number of yellow cards

indirect_red_cards Number of indirect red cards

direct_red_cards Number of direct red cards

Source

FIFA website. `https://www.fifa.com/worldcup/archive/southafrica2010/statistics/teams/goal-scored` and `https://www.fifa.com/worldcup/archive/southafrica2010/statistics/teams/disciplinary`

GeomFlatViolin   *Flat violin geometry*

Description

Flat violin geometry

---

geom_flat_violin   *Half violin plot*

Description

Half violin plot

Usage

```
geom_flat_violin(
  mapping = NULL,
  data = NULL,
  stat = "ydensity",
  position = "dodge",
  trim = TRUE,
  scale = "area",
  show.legend = NA,
  inherit.aes = TRUE,
  ...
)
```

Arguments

`mapping`	The mapping
`data`	data.frame
`stat`	statistic (don't change)
`position`	position dodge
`trim`	Logical
`scale`	Scale (don't change)
`show.legend`	Logical
`inherit.aes`	Logical
`...`	other arguments

Value

A layer for a `ggplot2::ggplot` object, similar to e.g. `ggplot2::geom_violin`.

Source

urlhttps://gist.github.com/dgrtwo/eb7750e74997891d7c20

See Also

[`ggplot2::geom_violin()`](ggplot2::geom_violin()), which provided the basis of this function.

Examples

```
library(ggplot2)
data(diamonds)
ggplot(diamonds, aes(cut, carat)) + geom_flat_violin() + coord_flip()
```

---

legacy2015 *Legacy motives and pro-environmental behaviour*

Description

Legacy motives and pro-environmental behaviour

Usage

```
legacy2015
```

Format

A data frame with 245 rows and 9 variables:

id (numeric) ID variable relating to the original dataset

sex (character) biological sex of participant (male or female)

age (numeric) age in years

legacy (numeric) Sverage of 8 items reflecting legacy motivation, on a scale from 1 (Not at all) to 6 (A great amount)

belief (numeric) average of 5 items reflecting belief in climate change, on a scale from 1 (Strongly Disagree) to 7 (Strongly Agree)

intention (numeric) average of 8 items reflecting intention to act in a pro-environmental way, on a scale from 1 (Never) to 6 (All the time)

education (numeric) Level of education, 1 = 8th grade or less, 2 = Some high school, 3 = Graduated high school, 4 = Some college or technical school, 5 = Graduated college or technical school, 6 = Post-graduate

income (numeric) Approximate household income, 1 = less than $20K, 2 = $20K-$35K, 3 = $35K-$50K 4 = $50K-$75K, 5 = $75K-100K, 6 = more than 100K

donation (numeric) Donation of possible bonus payment, between $0 and $10

Source

Harvard DataVerse https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/27740&version=1.0

Examples

```
## Not run:
 # this dataset was processed from the raw data as follows:
 tdat <- read.csv("legacy study - pilot_data.csv")

## End(Not run)
```

---

plot_qq_marginals	*Q-Q plots with distributions in the margins*

Description

`plot_qq_marginals` creates an enhanced Q-Q plot with the observed and theoretical distributions shown in the margins of the plot.

Usage

```
plot_qq_marginals(
  x,
  breaks = "Sturges",
  newpage = TRUE,
  xlab = "Observed Quantiles",
  ylab = "Theoretical quantiles",
  xlim = grDevices::extendrange(c(min(x), max(x))),
  ylim = NULL,
  main = NULL,
  sub = NULL,
  axes = TRUE,
  border = TRUE,
  ...
)
```

Arguments

x	A numeric vector
breaks	How to compute breakpoints for the histogram. See ?hist
newpage	(logical) Should the plot be plotted on a new page?
xlab	Label for x-axis
ylab	Label for y-axis
xlim	Range of x values shown
ylim	Range of y values shown
main	Main title
sub	Subtitle
axes	(logical) Draw axes?
border	(logical) Draw a border?
...	Further arguments

Value

No return value. The function adds a plot to the active graphics window.

Examples

```
data(anchoring)
plot_qq_marginals(anchoring$everest_feet)
```

---

plot_raincloud   *Create a raincloud plot*

Description

`plot_raincloud` creates a raincloud plot to display the distribution of data by a combination of
a a boxplot, a kernel density plot, and a scatterplot. The boxplot includes the median (displayed
as a horizontal line) and the mean (displayed as a point). It does not indicate potential outliers, as
these can be seen in the scatter plot. The kernel density plot provides a nonparametric estimate of
the distribution. The scatterplot depicts all values in y with random jittering on the x-axis. The
data can be grouped by supplying a grouping factor in the `groups` argument, in which case multiple
raincloud plots are shown side by side. As `plot_raincloud` provides a `ggplot2::ggplot` object,
it can be combined with further layers and functionality from the `ggplot2` package.

Usage

```
plot_raincloud(data, y, horizontal = FALSE, groups, point_size = 0.5, ...)
```

Arguments

`data`	Data.frame (or tibble)
`y`	The unquoted name of the variable in data for which to create the raincloud plot
`horizontal`	(logical) change the orientation of the plot
`groups`	An unquoted name of grouping variable in data (ideally a factor)
`point_size`	Size of the jittered points
`...`	Other arguments, passed to ggplot(aes(...))

Value

An object of class gg, i.e. a ggplot object from the `ggplot2` package

Source

Allen M, Poggiali D, Whitaker K et al. Raincloud plots: a multi-platform tool for robust data
visualization. Wellcome Open Res 2019, 4:63 (doi: 10.12688/wellcomeopenres.15191.1)

See Also

`ggplot2::ggplot()` for information about ggplot objects, `ggplot2::theme()` for information
about changing various aspects of the plot, and `ggplot2::facet_wrap()` and `ggplot2::facet_grid()`
for creating multiple raincloud plots for different levels of grouping factors beyond those specified
in `groups`.

Examples

```
data(anchoring)
plot_raincloud(anchoring,y=everest_feet)
plot_raincloud(anchoring,y=everest_feet,groups=anchor)
plot_raincloud(anchoring,y=everest_feet,groups=anchor) +
    ggplot2::facet_wrap(~us_or_international) +
    ggplot2::ylab("How high is Mount Everest (in feet)?")
```

position_jitternudge   *Simultaneously nudge and jitter*

Description

Simultaneously nudge and jitter

Usage

```
position_jitternudge(
  jitter.width = NULL,
  jitter.height = 0,
  nudge.x = 0,
  nudge.y = 0,
  seed = NA
)
```

Arguments

jitter.width	degree of jitter in x direction. Defaults to 40% of the resolution of the data.
jitter.height	degree of jitter in y direction. Defaults to 0.
nudge.x	the amount to nudge in the x direction.
nudge.y	the amount to nudge in the y direction.
seed	Optional seed for the random jitter

Value

Positions for data in a ggplot2::ggplot object, similar to e.g. ggplot2::position_jitter

See Also

[ggplot2::position_jitter()](), which is the basis of this function.

Examples

```
library(ggplot2)
dsub <- diamonds[ sample(nrow(diamonds), 1000), ]
ggplot(dsub, aes(x = cut, y = carat, fill = clarity)) +
  geom_boxplot(outlier.size = 0) +
  geom_point(pch = 21, position = position_jitterdodge())
```

redist2015	*Redistribution of wealth*

Description

It is generally found that wealthy people tend to be more opposed to policies to reduce wealth in-equalities. This may be unsurprising from a classical economic standpoint, because the material burden of the redistribution of wealth will fall on wealthier people. Wealthier people are also more likely than poorer people to adopt political ideologies that oppose redistribution policies. Dawtry, Sutton, and Sibley (2015) investigated whether, in addition to such factors, "social-sampling processes" lead wealthier people to oppose redistribution policies. Social sampling is the idea that people (partly) base inferences on their social surroundings. Wealthier people tend to live in more affluent areas and move in wealthier social circles. This may bias their view of the world, where wealthier people estimate the general population to be wealthier (with less of a gap between the wealthy and the poor) than it really is.

Usage

```
redist2015
```

Format

A data frame with 305 rows and 12 variables:

id unique ID number for each participant

gender only "male" or "female" could be answered by the looks of it

age participant age in years

income yearly household income (in units of $1,000)

pol_att political leaning from 1="Extremely Liberal" to 9="Extremely Conservative"

PD_mean estimate average household income in the general US population

PD_gini GINI index computed for a subjective distribution of wealth in the general US population. The GINI index is a measure of wealth inequality; higher numbers mean more inequality

PD_fair Answer to the question "To what extent do you feel that household incomes are fairly–unfairly distributed across the US population?" on a scale from 1="Extremely Fair" to 9 = "Extremely Unfair".

PD_sat Answer to the question "How satisfied–dissatisfied are you with the way in which household incomes are distributed across the US population?" on a scale from 1="Extremely satisfied" to 9="Extremely dissatisfied".

SC_mean estimate average household income in the participant's social circles

SC_gini (subjective) inequality in the participant's social circles

redist support for wealth redistribution policies (average of four items, higher scores indicate stronger support).

Details

In Experiment 1a of Dawtry, Sutton, and Sibley (2015), they assessed income and opinions for n=305 online U.S. participants recruited via Amazon's Mechanical Turk.

Source

https://osf.io/3mftr/. See also Dawtry, Rael J., Robbie M. Sutton, and Chris G. Sibley. 2015. "Why Wealthier People Think People Are Wealthier, and Why It Matters: From Social Sampling to Attitudes to Redistribution." Psychological Science 26 (9): 1389–1400. doi: 10.1177/0956797615586560.

---

sample_mode	*Compute a sample mode*

Description

sample_mode computes the sample mode, i.e. the value in x with the highest frequency of occurrence. If there are multiple modes, the mode that occurs first in x is returned, with a warning that lists the other modes found.

Usage

```
sample_mode(x)
```

Arguments

x   Numeric vector

Value

A single numeric value equal to the sample mode

Examples

```
data(anchoring)
sample_mode(anchoring$everest_feet)
# Multiple modes give a warning:
sample_mode(c(3,3,3,1,1,1,2,2,2))
```

---

sample_sd   *Compute the sample standard deviation*

Description

sample_sd computes the sample standard deviation, i.e. the square root of the sum of squared deviations of x from the mean divided by the total number of observations. This is in contrast to sd, which computes an unbiased estimate of the standard deviation (i.e. it divides the sum of squared deviations by n - 1).

Usage

```
sample_sd(x, na.rm = FALSE)
```

Arguments

x   Numeric vector

na.rm   (logical) Should missing values be removed?

Value

A single numeric value equal to the sample variance

Examples

```
data(anchoring)
sample_sd(anchoring$everest_feet)
```

---

sample_var   *Compute the sample variance*

Description

sample_var computes the sample variance, i.e. the sum of squared deviations of x from the mean divided by the total number of observations. This is in contrast to var, which computes an unbiased estimate of the variance (i.e. it divides the sum of squared deviations by n - 1).

Usage

```
sample_var(x, na.rm = FALSE)
```

Arguments

x   Numeric vector

na.rm   (logical) Should missing values be removed?

Value

A single numeric value equal to the sample variance

Examples

```
data(anchoring)
sample_var(anchoring$everest_feet)
```

---

speeddate	*Speed dating*

Description

A subset of cases (wave 6-9) and variables (see below) from an experiment on speed dating. by Columbia Business School professors Ray Fisman and Sheena Iyengar for their paper Gender Differences in Mate Selection: Evidence From a Speed Dating Experiment.

Usage

```
speeddate
```

Format

A data frame with 1562 rows and 32 variables:

iid (numeric) unique ID variable of participant

pid (numeric) unique ID variable of date partner

gender (character) gender of participant (male or female)

age (numeric) age in years

date_like (numeric) how much they like their date partner in general (between 1 and 10)

other_like (numeric) how much their date partner likes them (between 1 and 10)

date_want do they want to go on another date with their date partner? (1 = yes, 0 = no)

other_want does their date partner want to go on another date with them? (1 = yes, 0 = no)

match do they both want to go on another date with each other? (1 = yes, 0 = no)

self_attr how attractive do they think they are? (between 1 and 10)

self_sinc how sincere do they think they are? (between 1 and 10)

self_intel how intelligent do they think they are? (between 1 and 10)

self_fun how much fun do they think they are? (between 1 and 10)

self_amb how ambitious do they think they are? (between 1 and 10)

other_attr,other_sinc,other_intel,other_fun,other_amb how attractive etc does their date partner think they are? (between 1 and 10)

other_shar how much does their date partner think they share hobbies and interests? (between 1 and 10)

date_attr,date_sinc,date_intel,date_fun,date_amb,date_shar how do they rate their date partner's attractiveness etc? (between 1 and 10)

self_imp_attr,self_imp_sinc,self_imp_intel,self_imp_fun,self_imp_amb,self_imp_shar how important do they find attractiveness etc in a partner? (between 1 and 10)

other_imp_attr,other_imp_sinc,other_imp_intel,other_imp_fun,other_imp_amb,other_imp_shar
how important does their date partner find attractiveness etc? (between 1 and 10)

Source

Kaggle https://www.kaggle.com/annavictoria/speed-dating-experiment

---

tetris2015 *Tetris and intrusive memories*

Description

Tetris and intrusive memories

Usage

tetris2015

Format

A data frame with 72 rows and 28 variables:

Condition (factor) Condition: Control, Tetris_Reactivation, Tetris, or Reactivation

Time_of_Day Time of day participant commenced experiment, either "morning" or "afternoon"

BDI_II Beck Depression Inventory-II (BDI-II): Total score

STAI_T Spielberger State-Trait Anxiety Trait scale (STAI): Total score

pre_film_VAS_Sad Self-rated level of Sadness: Pre-film VAS mood. VAS = visual analogue scale. All VAS mood scales anchored from "not at all" to "extremely" in response to the question "Right at this very moment I am feeling". Composite for pre-film mood calculated by summing the six pre-film VAS mood ratings

pre_film_VAS_Hopeless Self-rated level of Hopelessness: Pre-film VAS mood

pre_film_VAS_Depressed Self-rated level of Depressed: Pre-film VAS mood

pre_film_VAS_Fear Self-rated level of Fear: Pre-film VAS mood

pre_film_VAS_Horror Self-rated level of Horror: Pre-film VAS mood

pre_film_VAS_Anxious Self-rated level of Anxiousness: Pre-film VAS mood

post_film_VAS_Sad Self-rated level of Sadness: Post-film VAS mood. Composite for post-film mood calculated by summing the six post-film VAS mood ratings

post_film_VAS_Hopeless Self-rated level of Hopelessness: Post-film VAS mood

post_film_VAS_Depressed Self-rated level of Depressed: Post-film VAS mood

post_film_VAS_Fear Self-rated level of Fear: Post-film VAS mood

post_film_VAS_Horror Self-rated level of Horror: Post-film VAS mood

post_film_VAS_Anxious Self-rated level of Anxious: Post-film VAS mood

Attention_Paid_to_Film Attention paid to the film rating: How much attention did you pay to the film from 0-not at all to 10-extremely

Post_film_Distress Post film distress rating: How distressing did you find the film from 0-not at all to 10-extremely

Day_Zero_Number_of_Intrusions Day 0: Number of image-based intrusive memories in the Intrusion Diary (pre-intervention)

Days_One_to_Seven_Number_of_Intrusions Days 1-7: Number of image-based intrusive memories in the Intrusion Diary (post-intervention)

Visual_Recognition_Memory_Test Visual recognition memory test score: Number of correct responses (out of 22)

Verbal_Recognition_Memory_Test Verbal recognition memory test score: Number of correct responses (out of 32)

Number_of_Provocation_Task_Intrusions Intrusion Provocation Task (IPT): Number of image-based intrusive memories during 2min laboratory task on Day 7

Diary_Compliance Diary compliance rating - indicate how accurate you think your diary is from 1 - not at all accurate to 10 extremely

IES_R_Intrusion_subscale Impact of Event Scale-Revised (IES-R): Intrusion Subscale

Tetris_Total_Score Tetris game play computer score total - cumulative (sum of all games). Only participants who played Tetris have data relating to Tetris_Total_Score

Self_Rated_Tetris_Performance Self-rated Tetris performance: How difficult or easy did you find the game you just played. Only participants who played Tetris have data relating to Self_Rated_Tetris_Performance.

Tetris_Demand_Rating Demand rating: How much did you think Tetris after a distressing film would increase or decrease intrusive memories of the film: -10: extremely decrease, to +10: extremely increase

Source

https://osf.io/ideta/. See also James et al., 'Computer Game Play Reduces Intrusive Memories of Experimental Trauma via Reconsolidation-Update Mechanisms'.

| trump2016 | *Trump votes in 2016 for 50 US states and the District of Columbia* |

Description

Trump votes in 2016 for 50 US states and the District of Columbia

Usage

trump2016

Format

A data frame with 4632 rows and 5 variables:

state Name of the state

hate_groups Number of hate groups in the state in 2016 as reported by the Southern Poverty Law Center (<https://www.splcenter.org/hate-map>)

population Number of citizens in the state in 2016

hate_groups_per_million Number of hate groups per million citizens

percent_bachelors_degree_or_higher Percentage of citizens with a bachelor's degree of higher

percent_in_poverty Percentage of citizens below the poverty threshold

percent_Trump_votes Percentage of votes for Trump in the 2016 elections

Source

CSI Without Dead Bodies "Hate Groups and Trump's Vote%: Predictive effect present when education and poverty are considered" https://www.csiwithoutdeadbodies.com/2017/02/hate-groups-and-trumps-vote-html

---

uefa2008 *Predictions by Paul the Octopus in the 2008 UEFA Cup.*

Description

A dataset containing the predictions and outcomes of matches in the 2008 UEFA European Cup.

Usage

```
uefa2008
```

Format

A data frame with 6 rows and 4 variables:

Match countries playing

Prediction country predicted to win

Result score at the end of the match

Outcome whether Paul was correct or incorrect

Source

<https://en.wikipedia.org/wiki/Paul_the_Octopus>

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