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Description Supplementary materials and datasets for the book ``Modern Psychometrics With R'' (Mair, 2018, Springer useR! series).

Imports graphics, stats

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ageiat   *Time Series Implicit Association Test (Age)*

Description

The implicit association test (IAT) measures differential association of two target concepts with an
attribute. The outcome measure is the IAT D-measure, here transformed to a Cohen's d). There are
different types of IAT. This dataset contains outcomes from the age IAT (where most individuals
have an implicit preference for young over old) collected on the ProjectImplicit platform (http://implicit.harvard.edu/) from January 2007 to December 2015. Within each each month the
participants d-measures were averaged. This leads to a time series with 140 observations.

Usage

```
data("ageiat")
```

Format

A vector of Cohen's d-scores, measured at 108 points in time (January 2007 - December 2015).

Note

Thanks to Tessa Charlesworth and Mahzarin Banaji for sharing this dataset.

Source

Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. Psychological Review, 102, 4-27.

Greenwald, A. G., McGhee, D.E., & Schwartz, J. K. L. (1998). Measuring individual differences in implicit cognition: The Implicit Association Test. Journal of Personality and Social Psychology, 74, 1464-1480.

Nosek, B. A., Banaji, M. R., & Greenwald, A. G. (2002). Harvesting implicit group attitudes and beliefs from a demonstration web site. Group Dynamics: Theory, Research, and Practice, 6, 101-115.

Examples

```
data("ageiat")
str(ageiat)
```

ASTI   *Adult Self-Transcendence Inventory*

Description

The ASTI (Levenson et al., 2005) is a self-report scale measuring the complex target construct of wisdom. The items can be assigned to five dimensions: self-knowledge and integration (SI), peace of mind (PM), non-attachment (NA), self-transcendence (ST), and presence in the here-and-now and growth (PG).

Usage

```
data("ASTI")
```

Format

A data frame with 1215 individuals, 25 ASTI items (3 or 4 categories per items), and 2 covariates (gender, group). Item wordings:

ASTI1 I often engage in quiet contemplation. (PM; reversed)

ASTI2 I feel that my individual life is a part of a greater whole. (ST)

ASTI3 I don't worry about other people's opinions of me. (NA)

ASTI4 I feel a sense of belonging with both earlier and future generations. (ST)

ASTI5 My peace of mind is not easily upset. (PM)

ASTI6 My sense of well-being does not depend on a busy social life. (NA)

ASTI7 I feel part of something greater than myself. (ST)

ASTI8 My happiness is not dependent on other people and things. (NA; reversed)

ASTI9 I do not become angry easily. (PM)

ASTI10 I have a good sense of humor about myself. (SI; reversed)

`ASTI11` I find much joy in life. (PG; reversed)

`ASTI12` Material possessions don't mean much to me. (NA)

`ASTI13` I feel compassionate even toward people who have been unkind to me. (ST)

`ASTI14` I am not often fearful. (PG)

`ASTI15` I can learn a lot from others. (PG)

`ASTI16` I often have a sense of oneness with nature. (ST)

`ASTI17` I am able to accept my mortality. (PG)

`ASTI18` I often "lose myself" in what I am doing. (PG)

`ASTI19` I feel that I know myself. (SI; reversed)

`ASTI20` I am accepting of myself, including my faults. (SI; reversed)

`ASTI21` I am able to integrate the different aspects of my life. (SI; reversed)

`ASTI22` I can accept the impermanence of things. (PM; reversed)

`ASTI23` I have grown as a result of losses I have suffered. (PG; reversed)

`ASTI24` Whatever [good] I do for others, I do for myself. (ST; reversed)

`ASTI25` Whatever [bad] I do to others, I do to myself. (ST)

`gender` gender

`group` student vs. non-student

Source

Levenson, M. R., Jennings, P. A., Aldwin, C. M., & Shiraishi, R. W. (2005). Self-transcendence: conceptualization and measurement. The International Journal of Aging and Human Development, 60, 127-143.

Koller I., Levenson, M. R. , & Glueck, J. (2017). What do you think you are measuring? A mixed-methods procedure for assessing the content validity of test items and theory-based scaling. Frontiers in Psychology, 8(126), 1-20.

Examples

```
data(ASTI)
si <- ASTI[ ,c(10,19,20,21)]        ## self-knowledge and integration
pm <- ASTI[ ,c(1,5,9,22)]           ## peace of mind
na <- ASTI[ ,c(3,6,8,12)]           ## non-attachment
st <- ASTI[ ,c(2,4,7,13,16,24,25)]  ## self-transcendence
pg <- ASTI[ ,c(11,14,15,17,18,23)]  ## Presence in the here-and-now and growth
```

AvalanchePrep	*Preparanedness Backcountry Skiing*

Description

Haegeli et al. (2012) studied high-risk cohorts in a complex and dynamic risk environment. This dataset contains four variables related to preparedness before going backcountry skiing. The variables with response categories are are 1) check avalanche danger information (check conditions on internet prior to leaving home; talk to ski patrol; check postings at gates or information kiosks at resort; do not check or Do not know), 2) discuss avalanche hazard in your group (all the time; 50% to 90% of time; 10% to 40% of time; never or solo traveller), 3) approach to decision making (dedicated leader or everybody contributes; person in front decides; everybody makes their own choices or solo traveller), and 4) use of avalanche safety gear (everybody carries beacon, shovel and probe; everybody carries beacon or beacon and shovel; some in group carry beacons; some in group have cell phones; no safety equipment is carried).

Usage

```
data("AvalanchePrep")
```

Format

A data frame with 1355 skiers and the following 4 items:

info Check avalanche danger information.

discuss Discuss avalanche hazard in your group.

gear Use of avalanche safety gear.

decision Approach to decision making.

Source

Haegeli, P., Gunn, M., & Haider, W. (2012). Identifying a high-risk cohort in a complex and dynamic risk environment: Out-of-bounds skiing–an example from avalanche safety. Prevention Science, 13, 562-573.

Examples

```
data("AvalanchePrep")
str(AvalanchePrep)
```

---

bandpref   *Band Preferences*

Description

Toy dataset involving paired comparisons of bands. 200 people stated their preferences of 5 bands in a paired comparison design (no undecided answer allowed).

Usage

```
data("bandpref")
```

Format

A data frame with 10 paired comparisons (200 people):

Band1 First band

Band2 Second band

Win1 How often first band was preferred

Win2 How often second band was preferred

Examples

```
data("bandpref")
str(bandpref)
```

Bergh   *Generalized Prejudice Dataset*

Description

Dataset from Bergh et al. (2016) where ethnic prejudice, sexism, sexual prejudice against gays and lesbians, and prejudice toward mentally people with disabilities are modeled as indicators of a generalized prejudice factor. It also includes indicators for agreeableness and openness. All variables are composite scores based on underlying 5-point questionnaire items.

Usage

```
data("Bergh")
```

Format

A data frame with 861 individuals, 10 composite scores, and gender:

EP Ethnic prejudice

SP Sexism

HP Sexual prejudice against gays and lesbians

DP Prejudice toward mentally people with disabilities

A1 Agreeableness indicator 1

A2 Agreeableness indicator 2

A3 Agreeableness indicator 3

O1 Openness indicator 1

O2 Openness indicator 2

O3 Openness indicator 3

gender gender

Source

Bergh, R., Akrami, N., Sidanius, J., & Sibley, C. (2016) Is group membership necessary for understanding prejudice? A re-evaluation of generalized prejudice and its personality correlates. Journal of Personality and Social Psychology, 111, 367-395.

Examples

```
data("Bergh")
str(Bergh)
```

BrainIQ   *Brain Size and Intelligence*

Description

Willerman et al. (1991) conducted their study at a large southwestern university. They selected a sample of 40 right-handed Anglo introductory psychology students who had indicated no history of alcoholism, unconsciousness, brain damage, epilepsy, or heart disease. These subjects were drawn from a larger pool of introductory psychology students with total Scholastic Aptitude Test Scores higher than 1350 or lower than 940 who had agreed to satisfy a course requirement by allowing the administration of four subtests (Vocabulary, Similarities, Block Design, and Picture Completion) of the Wechsler (1981) Adult Intelligence Scale-Revised. With prior approval of the University's research review board, students selected for MRI were required to obtain prorated full-scale IQs of greater than 130 or less than 103, and were equally divided by sex and IQ classification.

Usage

```
data("BrainIQ")
```

Format

A data frame with 40 individuals and the following 7 variables.

Gender Participant's gender.
FSIQ Full Scale IQ.
VIQ Verbal IQ.
PIQ Performance IQ.
Weight Body weight.
Height Body height.
MRI_Count MRI pixel count (brain size).

Source

Willerman, L., Schultz, R., Rutledge, J. N., & Bigler, E. (1991). In vivo brain size and intelligence. Intelligence, 15, 223-228.

Examples

```
data(BrainIQ)
str(BrainIQ)
```

BSSS   *Brief Sensation Seeking Scale Questions (BSSS-8)*

Description

Haegeli et al. (2012) where interested in studying risk-taking behaviors of out-of-bounds skiers. The skiers where exposed to the "Brief Sensation Seeking Scale" (BSSS-8; Hoyle et al., 2002). It is a short 8-item scale with 5-point response categories. The scale has 4 subscales (with 2 items each): experience seeking (ES), boredom susceptibility (BS), thrill and adventure seeking (TAS) and disinhibition (DIS).

Usage

```
data("BSSS")
```

Format

A data frame with 1626 skiers and the following 8 items (5 response categories):

Explore I would like to explore strange places.
Restless I get restless when I spend too much time at home .
Frightning I like to do frightening things.
Party I like wild parties.
Trip I would like to take off on a trip with no pre-planned routes or timetables.
Friends I prefer friends who are exciting and unpredictable.
Bungee I would like to do bungee jumping.
Illegal I would love to have new and exciting experiences, even if they are illegal.

Source

Hoyle, R. H., Stephenson, M. T., Palmgreen, P., Lorch, E. P., & Donohew, R. L. (2002). Reliability and validity of a brief measure of sensation. Personality and Individual Differences, 32, 401-414.

Haegeli, P., Gunn, M., & Haider, W. (2012). Identifying a high-risk cohort in a complex and dynamic risk environment: Out-of-bounds skiing–an example from avalanche safety. Prevention Science, 13, 562-573.

Examples

```
data("BSSS")
str(BSSS)
```

CEAQ   *Children's Empathic Attitudes Questionnaire (CEAQ)*

Description

The CEAQ (Funk et al., 2008) is a scale to measure empathy of late elementary and middle-school aged children.

Usage

```
data("CEAQ")
```

Format

A data frame with 208 children, 16 CEAQ items and 3 covariates (age, grade, gender): Item wordings:

ceaq1 When I'm mean to someone, I usually feel bad about it later.

ceaq2 I'm happy when the teacher says my friend did a good job.

ceaq3 I would get upset if I saw someone hurt an animal.

ceaq4 I understand how other kids feel.

ceaq5 I would feel bad if my mom's friend got sick.

ceaq6 Other people's problems really bother me.

ceaq7 I feel happy when my friend gets a good grade.

ceaq8 When I see a kid who is upset it really bothers me.

ceaq9 I would feel bad if the kid sitting next to me got in trouble.

ceaq10 It's easy for me to tell when my mom or dad has a good day at work.

ceaq11 It bothers me when my teacher doesn't feel well.

ceaq12 I feel sorry for kids who can't find anyone to hang out with.

ceaq13 Seeing a kid who is crying makes me feel like crying.

ceaq14 If two kids are fighting, someone should stop it.

ceaq15 It would bother me if my friend got grounded.

ceaq16 When I see someone who is happy, I feel happy too.

age Children's age.

grade Children's grade.

gender Gender.

Source

Funk, J. B., Fox, C. M., Chang, M., & Curtiss, K. (2008). The development of the Children's Empathic Attitudes Questionnaire using classical and Rasch analyses. Journal of Applied Developmental Psychology, 29, 187-196.

Bond, T. G., & Fox, C. M. (2015). Applying the Rasch Model: Fundamental Measurement in the Human Sciences. Routledge.

Examples

```
data(CEAQ)
str(CEAQ)
```

---

chile   *Chile dataset.*

Description

This dataset is a modified version of the dataset used in Wright and London (2009), originally taken from pepperjoe.com. The chile length is categorized from longest to shortest.

Usage

```
data("chile")
```

Format

A data frame with 85 chiles and the following 3 variables.

name Chile name.

length Chile length: ordinal (1 ... longest, 10 ... shortest)

heat Chile heat scale (see details)

Details

Heat scale according to pepperjoe.com: 1-2 ... for sissys; 3-4 ... sort of hot; 5-6 ... fairly hot; 7-8 ... real hot; 9.5-9 ... torrid; 9.5-10 ... nuclear.

Source

Wright, D. B., & London, K. (2009). Modern Regression Techniques Using R. Sage.

Examples

```
data(chile)
str(chile)
```

---

condom	*Attitude towards condoms*

Description

This dataset is a modified version of the data used in de Ayala (2009). Originally, the data come from the voluntary HIV counseling and testing efficacy study performed by the center for AIDS prevention studies (2003).

Usage

```
data("condom")
```

Format

A data frame with 500 individuals and the following 7 variables. The 6 items were scored on a 4-point response scale (0 ... strongly disagree; 4 ... strongly agree).

Feel Condom does not have a good feel.

Buy I am embarrassed to buy condoms.

Put I am embarrased to put on condom.

Break Condoms break/slip off.

Cheat My partner wants condoms to cheat.

Uncomfortable My friends said that condoms are uncomfortable.

Country Participant's country (artificially added).

Source

de Ayala, R. J. (2009). The Theory and Practice of Item Response Theory. Guilford Press, New York

Examples

```
data(condom)
str(condom)
```

FamilyIQ *Family Intelligence*

Description

Dataset from Hox (2010) containing six intelligence measures. Children are nested within families.

Usage

```
data("FamilyIQ")
```

Format

A data frame with 399 children, nested within 60 families:

family Family ID.

child Child ID.

wordlist Word list intelligence measure.

cards Cards intelligence measure.

matrices Matrices intelligence measure.

figures Figures intelligence measure.

animals Animals intelligence measure.

occupation Occupation intelligence measure.

Source

Hox, J. J. (2010). Multilevel analysis: Techniques and applications (2nd ed.). New York: Routledge.

Van Peet, A. A. J. (1992). De potentieeltheorie van intelligentie. [The potentiality theory of intelligence]. Amsterdam: University of Amsterdam, Ph.D. Thesis.

Examples

```
data("FamilyIQ")
str(FamilyIQ)
```

---

granularity   *Granularity*

Description

Granularity refers to a person's ability to separate their emotions into specific types. People with low granularity struggle to separate their emotions (e.g., reporting that sadness, anger, fear, and others all just feel "bad""), whereas people with high granularity are very specific in how they parse their emotions (e.g., easily distinguishing between nuanced emotions like disappointment and frustration). A few outliers were removed compared to the original data.

Usage

```
data("granularity")
```

Format

A data frame with 143 individuals and the following 3 variables.

gran Granularity score

age Participant's age

gender Gender

Examples

```
data("granularity")
str(granularity)
```

HarvardPsych   *Research Topics Harvard Psychology Faculty*

Description

A frequency table with the faculty members in the rows and the research topics in the colunms. The data are based on a scraping job from the faculty website by extracting the research summary of each faculty members. Subsequently, the data were cleaned using basic text processing tools. Finally, a document term matrix was created containing the most important keywords in the columns.

Usage

```
data("HarvardPsych")
```

Format

A word frequency table spanned 29 faculty members and 43 keywords.

Source

URL: <http://psychology.fas.harvard.edu/faculty>

Examples

```
data("HarvardPsych")
str(HarvardPsych)
```

HRB   *Health Risk Behavior*

Description

Dataset based on a questionnaire assessing health risk behaviors, including smoking, drinking, and marijuana consumption. The questionnaire was presented to teenagers at 5 points in time (from middle school to high school). The items are binary: 0 = never, 1 = at least one.

Usage

```
data("HRB")
```

Format

A data frame with 538 individuals with 4 items presented at 5 points in time. Items:

Alcohol.1 Days with at least one drink in past year (T1).

Cigarettes.1 Number of cigarettes per day in past year (T1).

Alcohol2.1 Days with at least 5 drinks within a few hours in the past year (T1).

Marijuana.1 Times consumed marijuana in the past year (T1).

Alcohol.2 Days with at least one drink in past year (T2).

Cigarettes.2 Number of cigarettes per day in past year (T2).

Alcohol2.2 Days with at least 5 drinks within a few hours in the past year (T2).

Marijuana.2 Times consumed marijuana in the past year (T2).

Alcohol.3 Days with at least one drink in past year (T3).

Cigarettes.3 Number of cigarettes per day in past year (T3).

Alcohol2.3 Days with at least 5 drinks within a few hours in the past year (T3).

Marijuana.3 Times consumed marijuana in the past year (T3).

Alcohol.4 Days with at least one drink in past year (T4).

Cigarettes.4 Number of cigarettes per day in past year (T4).

Alcohol2.4 Days with at least 5 drinks within a few hours in the past year (T4).

Marijuana.4 Times consumed marijuana in the past year (T4).

Alcohol.5 Days with at least one drink in past year (T5).

Cigarettes.5 Number of cigarettes per day in past year (T5).

Alcohol2.5 Days with at least 5 drinks within a few hours in the past year (T5).

Marijuana.5 Times consumed marijuana in the past year (T5).

Note

Thanks to Peter Franz for providing this dataset.

Examples

```
data("HRB")
str(HRB)
```

---

iatfaces *Implicit Association Test (Faces)*

Description

The implicit association test (IAT) measures differential association of two target concepts with an attribute. In this experiment the participants saw images of people with long faces, images of people with wide faces, positively valenced words, and negatively valenced words. In the first critical block ("congruent block"), participants were asked to press one response key if they saw a long-faced person or a positive word and a different response key if they saw a wide-faced person or a negative word. In the second critical block ("incongruent block"), the pairing was reversed. Participants were asked to press one key for long-faced people or negative words and a different key for wide-faced people or positive words. IAT theory states that participants are expected to be able to respond fast in congruent conditions and slowly in incongruent conditions. The dataset contains trajectories of 4 participants. Each participant was exposed 80 trials: first, 40 congruent block trials, followed by 40 incongruent block trials. The response variable is latency.

Usage

```
data("iatfaces")
```

Format

A data frame (4 individuals, 320 observations in total) with the following variables:

block Congruent vs. incongruent.

latency Response time latency.

id Subject id.

trial Trial number.

Note

Thanks to Benedek Kurdi and Mahzarin Banaji for sharing this dataset.

Source

Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. Psychological Review, 102, 4-27.

Greenwald, A. G., McGhee, D.E., & Schwartz, J. K. L. (1998). Measuring individual differences in implicit cognition: The Implicit Association Test. Journal of Personality and Social Psychology, 74, 1464-1480.

Nosek, B. A., Banaji, M. R., & Greenwald, A. G. (2002). Harvesting implicit group attitudes and beliefs from a demonstration web site. Group Dynamics: Theory, Research, and Practice, 6, 101-115.

Examples

```
data("iatfaces")
str(iatfaces)
```

KoreanSpeech   *Korean Speech Data*

Description

This dataset represents a subset of the data collected in an experiment on the phonetic profile of Korean formality by Winter and Grawunder (2012). The authors were interested in pitch changes between two different attitudes (formal vs. informal).

Usage

```
data("KoreanSpeech")
```

Format

A data frame with 6 individuals (14 measurements per person) and the following variables:

subject Subject ID

gender Gender

scenario 7 interaction types ("making an appointment", "asking for a favor", "apologizing for coming too late", etc.)

attitude Formality: formal vs. informal.

frequency Pitch frequency in Hz

Source

Winter, B. (2013). Linear models and linear mixed effects models in R with linguistic applications. arXiv:1308.5499. (http://arxiv.org/pdf/1308.5499.pdf

Winter, B., & Grawunder, S. (2012) The phonetic profile of Korean formality. Journal of Phonetics, 40, 808-815.

Examples

```
data("KoreanSpeech")
str(KoreanSpeech)
```

Lakes   *Response to challenge scale*

Description

The response to challenge scale (RCS) is a theory-derived, observer-rated measure of children's self-regulation in response to a physically challenging situation (Lakes & Hoyt, 2004; Lakes, 2012). It asks raters to make inferences in 3 domains: cognitive (6 items), affective/motivational (7 items), and physical (3 items). The data included here are post test ratings from the study presented in Lakes & Hoyt (2009).

Usage

```
data("Lakes")
```

Format

A data frame in long format with 194 individuals and the following variables:

personID Person ID.

raterID Rater ID.

item Items for 3 subtests.

score 7-point response score.

subtest Subtests (cognitive, affective, physical).

Source

Lakes, K. D. (2012). The Response to Challenge Scale (RCS): The development and construct validity of an observer-rated measure of children's self-regulation. The International Journal of Educational and Psychological Assessment, 10, 83-96.

Lakes, K. D, & Hoyt, W. T. (2004). Promoting self-regulation through school-based martial arts training. Journal of Applied Developmental Psychology, 25, 283-302.

Lakes, K. D., & Hoyt, W. T. (2009). Applications of generalizability theory to clinical child and adolescent psychology research. Journal of Clinical Child & Adolescent Psychology, 38, 144-165.

Examples

```
data("Lakes")
str(Lakes)
```

---

learnemo   *Learning related emotions in mathematics*

Description

This dataset considers achievement emotions students typically experience when learning mathematics. The authors considered 5 emotions: enjoyment (coded as 1), pride (2), anger (3), anxiety (4) and boredom (5). The data are organized in terms of paired comparisons (in standard order).

Usage

```
data("learnemo")
```

Format

A data frame with 111 individuals and the following paired comparisons (0 if the first emotion was chosen, 2 if the second emotion was chosen, and 1 if no decision was made).

pc1_2 enjoyment vs. pride.

pc1_3 enjoyment vs. anger.

pc2_3 pride vs. anger.

pc1_4 enjoyment vs. anxiety.

pc2_4 pride vs. anxiety.

pc3_4 anger vs. anxiety.

pc1_5 enjoyment vs. boredom.

pc2_5 pride vs. boredom.

pc3_5 anger vs. boredom.

pc4_5 anxiety vs. boredom.

sex Participant's sex (1 = male, 2 = female).

Source

Grand, A., & Dittrich, R. (2015) Modelling assumed metric paired comparison data - application to learning related emotions. Austrian Journal of Statistics, 44, 3-15.

Examples

```
data("learnemo")
str(learnemo)
```

NeuralActivity	*Neural Activity*

Description

20 participants were scanned (fMRI) while performing a task designed to elicit their thoughts about 60 mental states. On each trial, participants saw the name of a mental state (e.g., "awe"), and decided which of two scenarios would better evoke that mental state in another person (e.g., "seeing the Pyramids" or "watching a meteor shower"). Based on these measures, a 60×60 correlation matrix was computed for each individual, subsequently converted into a dissimilarity matrix. In total, we have 20 such dissimilarity matrices. As additional external scales, NeuralScales gives 16 dimensions extracted from the psychological literature as a starting point for developing a theory of mental state representation: valence, arousal, warmth, competence, agency, experience, emotion, reason, mind, body, social, nonsocial, shared, and unique.

Usage

```
data("NeuralActivity")
data("NeuralScales")
data("NeuralScanner")
```

Format

A list of 20 dissimilarity matrices (NeuralActivity).

External scales (based on a questionnaire) containing proportions telling us to which degree people associate each of the 60 mental states to the 16 theoretical dimensions they extracted from the literature (NeuralScales).

Scanner information on states, onset times and stimulus duration (NeuralScanner).

Head motion parameters (NeuralHM).

Source

Tamir D. I., Thornton M. A., Contreras J. M., & Mitchell J. P. (2015) Neural evidence that three dimensions organize mental state representation: rationality, social impact, and valence. Proceedings of the National Academy of Sciences of the United States of America, 113(1), 194-199.

Examples

```
data(NeuralActivity)
str(NeuralActivity)

data(NeuralScales)
str(NeuralScales)

data(NeuralScanner)
str(NeuralScanner)
```

Pashkam   *Goal-Directed Visual Processing*

Description

Data derived from an fMRI experiment on visual representations. In the original experiment there
were three experimental conditions (color on objects and background, color on dots, color on ob-
jects), three brain regions of interest (V1, PFS, Superior IPS), and two tasks (color and shape). The
data included here are two dissimilarity matrices involving eight objects presented to the partici-
pants. The first matrix is based on a color task, the second matrix on a shape task.

Usage

```
data("Pashkam")
```

Format

A list of 2 dissimilarity matrices (color task and shape task):

BD Body

CT Cat

CH Chair

CR Car

EL Elephant

FA Face

HO House

SC Scissors

Source

Vaziri-Pashkam M., & Xu, Y. (2017) Goal-directed visual processing differentially impacts human
ventral and dorsal visual representations. The Journal of Neuroscience, 37, 8767-8782.

Examples

```
data(Pashkam)
str(Pashkam)
```

Paskvan	*Cognitive appraisal of work intensification*

Description

Due to economic and technological changes, work has intensified over the past few decades. This intensification of work takes a toll on employees well-being and job satisfaction. Paskvan et al. (2016) established a model which explores the effects of work intensification on various outcomes (emotional exhaustion, job satisfaction). They used cognitive appraisal (i.e., how an individual views a situation) as a mediator and the participative climate as a moderator of the relationship between work intensification and cognitive appraisal.

Usage

```
data("Paskvan")
```

Format

A data frame with 803 individuals and the following 4 variables.

pclimate Participative climate.

wintense Work Intensification.

cogapp Cognitive appraisal of work intensification.

emotion Emotional exhaustion.

Source

Paskvan, M., Kubicek, B., Prem, R., & Korunka, C. (2016). Cognitive appraisal of work intensification. International Journal of Stress Management, 23, 124-146.

Examples

```
data("Paskvan")
str(Paskvan)
```

Privacy	*Internet Privacy*

Description

These items measure various advantages and disadvantages which online users perceive when providing personal information on the Internet. The items are based on 25 qualitative interviews with online Marketing companies and experts as well as customer advocates. They represent the opinions of both organizations and individuals. Advantages of providing personal information online include support for purchasing decisions, increased satisfaction, targeted communication, participation in raffles, time savings and interesting content. Disadvantages include unsolicited advertising, excessive data collection, lack of information about data usage and decreasing service quality.

Usage

```
data("Privacy")
```

Format

A data frame with 405 individuals and the following 10 variables.

apc1 Individualized communication supports me in making purchase decisions.

apc2 Individualized communication increases my satisfaction with the organization.

apc3 Individualization reduces the total amount of communication (e.g. the amount of emails I receive), since companies can advertise more target-oriented.

apc4 I provide correct data, if I have a change of winning prizes.

apc5 I provide correct data, if it saves me time (e.g. if I don't have to key in the data in the future).

apc6 I provide correct data, if I get access to interesting content.

dpc1 On the Internet my data are permanently collected and I can do nothing against it.

dpc2 I feel that I am badly informed about the usage of my data.

dpc3 If I divulge personal data, I lose control over how companies use my data.

dpc4 Personalization leads to an increase in unsolicited advertising messages, since companies know what I am interested in.

Source

Treiblmaier, H. (2006) Datenqualitaet und individualisierte Kommunikation" [Data Quality and Individualized Communication], DUV Gabler Edition Wissenschaft, Wiesbaden.

Treiblmaier, H., Bentler, P. M., & Mair, P. (2011). Formative constructs implemented via common factors. Structural Equation Modeling: A Multidisciplinary Journal, 18, 1-17.

Examples

```
data(Privacy)
str(Privacy)
```

Rmotivation   *Motivational structure of R package authors*

Description

Motivation is accurately understood as a complex continuum of intrinsic, extrinsic, and internalized extrinsic motives. This dataset contains three subscales for that measure extrinsic (12 items), hybrid (19 items), and intrinsic (5 items) aspects of motivation in relation to why package authors contribute to the R environment. The items were taken from Reinholt's motivation scale and adapted to R package authors. Each item started with "I develop R packages, because...".

Usage

```
data("Rmotivation")
```

Format

A data frame with 852 individuals, 36 motivation items, and 9 covariates:

ext1 I can publish the packages in scientific journals.

ext2 they are part of my master / PhD thesis.

ext3 I need them for teaching courses.

ext4 I develop them for clients who pay me.

ext5 they are a byproduct of my empirical research. If I cannot find suitable existing software to analyze my data, I develop software components myself.

ext6 they are a byproduct of my methodological research. If I develop/extend methods, I develop accompanying software, e.g., for illustrations and simulations.

ext7 I expect an enhancement of my career from it.

ext8 my employer pays me to do so.

ext9 that's what my friends do.

ext10 it is expected from me.

ext11 that's what my work colleagues do.

ext12 it comes more or less with my job.

hyb1 it is an important task for me.

hyb2 I believe that it is a necessity.

hyb3 I believe it is vital to improve R.

hyb4 I feel that R requires continuous enhancement.

hyb5 I think that it is of importance.

hyb6 it is part of my identity.

hyb7 it is important for my personal goals but for no apparent rewards, such as money, career opportunities, etc.

hyb8 it is part of my character to do so.

hyb9 it is an integral part of my personality.

hyb10 it is in line with my personal values.

hyb11 I feel an obligation towards the R community.

hyb12 it reflects my responsibility towards the R community.

hyb13 I believe that it is appropriate to do so.

hyb14 I aim for social approval of my activities.

hyb15 I am committed to the R community.

hyb16 I can feel satisfied with my performance.

hyb17 it leaves me with a feeling of accomplishment.

hyb18 it gives me satisfaction to produce something of high quality.

hyb19 I get the feeling that I've accomplished something of great value.

int1 I enjoy undertaking the required tasks.

int2 I take pleasure in applying my skills.

int3 it means pure fun for me.

int4 I feel that it is an interesting exercise.

int5 it is a joyful activity.

lists Participation in R lists.

meet Participation in R meetings/conferences.

npkgs Number of packages developed/contributed.

gender Gender.

phd PhD degree.

statseduc Education in statistics.

fulltime Full-time vs. part-time employment.

academia Work in acedemia.

statswork Work in the area of statistics.

Source

Mair, P., Hofmann, E., Gruber, K., Zeileis, A., & Hornik, K. (2015) Motivation, values, and work design as drivers of participation in the R open source Project for Statistical Computing. Proceedings of the National Academy of Sciences of the United States of America, 112(48), 14788-14792.

Reinholt, M. (2006). No more polarization, please! Towards a more nuanced perspective on motivation in organizations. Technical report, Center for Strategic Management Working Paper Series, Copenhagen Business School, Copenhagen, Denmark.

Examples

```
data(Rmotivation)
str(Rmotivation)
```

Rmotivation2   *Psychometric structure of R package authors*

Description

This dataset contains factor scores (person parameters) based on a 2-PL IRT model fitted on the following three scales: word design questionnaire (WDQ; task, social, and knowledge characteristics), Reinholt's motivation scale (extrinsic, intrinsic, hyrbrid), and Schwartz' value scale (universalism, power, self-direction).

Usage

```
data("Rmotivation2")
```

Format

A data frame with 764 individuals and the following 18 variables.

lists Participation in R lists.

meet Participation in R meetings/conferences.

npkgs Number of packages developed/contributed.

wtask WDQ task subscale.

wsocial WDQ social subscale.

wknowledge WDQ knowledge subscale.

mextrinsic Extrinsic motivation.

mhybrid Hybrid motivation.

mintrinsic Intrinsic motivation.

vuniversalism Schwartz value universalism.

vpower Schwartz value power.

vselfdirection Schwartz value self-direction.

gender Gender.

phd PhD degree.

statseduc Education in statistics.

fulltime Full-time vs. part-time employment.

academia Work in acedemia.

statswork Work in the area of statistics.

Source

Mair, P., Hofmann, E., Gruber, K., Zeileis, A., & Hornik, K. (2015) Motivation, values, and work design as drivers of participation in the R open source Project for Statistical Computing. Proceedings of the National Academy of Sciences of the United States of America, 112(48), 14788-14792.

See Also

Rmotivation

Examples

```
data("Rmotivation2")
str(Rmotivation2)
```

| Rogers | *Co-Morbid Obsessive-Compulsive Disorder and Depression* |

Description

Depression/OCD Data Collected at Rogers Memorial Hospital. The scales used in this study were the Quick Inventory of Depressive Symptomatology - self-report version (QIDS-SR), and the Yale-Brown Obsessive Compulsive Scale - self-report (Y-BOCS-SR). The depression scale has 16 items (5 response categories), the OCD scale 10 items (4 response categories).

Usage

```
data("Rogers")
```

Format

A data frame with 408 individuals and the following 26 variables (16 depression items followed by 10 OCD items).

onset Sleep-onset insomnia.

middle Middle insomnia.

late Early morning awakening.

hypersom Hypersomnia.

sad Sadness.

decappetite Decreased appetite.

incappetite Increased appetite.

weightloss Weight loss.

weightgain Weight gain.

concen Concentration impairment.

guilt Guilt and self-blame.

suicide Suicidal thoughts, plans or attempts.

anhedonia Anhedonia.

fatigue Fatigue.

retard Psychomotor retardation.

agitation Agitation.

obtime Time consumed by obsessions.

obinterfer Interference due to obsessions.

obdistress Distress caused by obsessions.

obresist Difficulty resisting obsessions.

obcontrol Difficulty controlling obsessions.

comptime Time consumed by compulsions.

compinterf Interference due to compulsions.

compdis Distress caused by compulsions.

compresis Difficulty resisting compulsions.

compcont Difficulty controlling compulsions.

Source

McNally, R. J., Mair, P., Mugno, B. L., and Riemann, B. C. (2017). Comorbid obsessive-compulsive disorder and depression: A Bayesian network approach. Psychological Medicine, 47(7), 1204-1214.

Examples

```
data("Rogers")
str(Rogers)
```

Rogers_Adolescent *Co-Morbid Obsessive-Compulsive Disorder and Depression – Adolescents*

Description

Depression/OCD Data Collected at Rogers Memorial Hospital. The scales used in this study were the Quick Inventory of Depressive Symptomatology self-report version (QIDS-SR), and the Yale-Brown Obsessive Compulsive Scale - self-report (Y-BOCS-SR). The depression scale has 16 items (5 response categories), the OCD scale 10 items (4 response categories).

Usage

```
data("Rogers_Adolescent")
```

Format

A data frame with 87 individuals and 26 variables (16 depression items followed by 10 OCD items). See ?Rogers for details on individual items.

Source

Jones, P. J., Mair, P., Riemann, B. C., Mugno, B. L., & McNally, R. J. (2018). A network perspective on comorbid depression in adolescents with obsessive-compulsive disorder. Journal of Anxiety Disorders, 53, 1-8. #'

Examples

```
data("Rogers_Adolescent")
str(Rogers_Adolescent)
```

RWDQ   *Work design questionnaire R package authors*

Description

Contains the knowledge characteristics subscale of the Work Design Questionnaire (WDQ). Knowledge characteristics include job complexity, information processing, problem solving, skill variety, and specialization.

Usage

```
data("RWDQ")
```

Format

A data frame with 1055 individuals and 18 items: job complexity (22-24), information processing (25-27), problem solving (28-31), variety of skills (32-35), specialization (36-39). Item wordings:

wdq_22 The work on R packages requires that I only do one task or activity at a time.

wdq_23 The work on R packages comprises relatively uncomplicated tasks.

wdq_24 The work on R packages involves performing relatively simple tasks.

wdq_25 The work on R packages requires that I engage in a large amount of thinking.

wdq_26 The work on R packages requires me to keep track of more than one thing at a time.

wdq_27 The work on R packages requires me to analyze a lot of information

wdq_28 The work on R packages involves solving problems that have no obvious correct answer.

wdq_29 The work on R packages requires me to be creative.

wdq_30 The work on R packages often involves dealing with problems that I have not encountered before.

wdq_31 The work on R packages requires unique ideas or solutions to problems.

wdq_32 The work on R packages requires data analysis skills.

wdq_33 The work on R packages requires programming skills.

wdq_34 The work on R packages requires technical skills regarding package building and documentation.

wdq_35 The work on R packages requires the use of a number of skills.

wdq_36 The work on R packages is highly specialized in terms of purpose, tasks, or activities.

wdq_37 The tools, procedures, materials, and so forth used to develop R packages are highly specialized in terms of purpose.

wdq_38 The work on R packages requires very specialized knowledge.

wdq_39 The work on R packages requires a depth of expertise.

Source

Mair, P., Hofmann, E., Gruber, K., Zeileis, A., & Hornik, K. (2015) Motivation, values, and work design as drivers of participation in the R open source Project for Statistical Computing. Proceedings of the National Academy of Sciences of the United States of America, 112(48), 14788-14792.

Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. Journal of Applied Psychology, 91, 1321-1339

Examples

```
data(RWDQ)
str(RWDQ)
```

SDOwave   *Longitudinal Social Dominance Orientation (SDO)*

Description

Contains 4 SDO items measured across 5 years (1996-2000). Each item is scored on a 7-point scale.

Usage

```
data("SDOwave")
```

Format

Data frame containing 612 subjects, 4 items measure across 5 years (wide format). Here are the item labels for one year:

I1.1996 It's probably a good thing that certain groups are at the top and other groups are at the bottom.

I2.1996 Inferior groups should stay in their place.

I3.1996 We should do what we can to equalize conditions for different groups (reversed).

I4.1996 Increased social equality is beneficial to society (reversed).

Note

Thanks to Jim Sidanius for providing this dataset.

References

Sidanius, J., & Pratto, F. (2001). Social Dominance: An Intergroup Theory of Social Hierarchy and Oppression. Cambridge University Press, Cambridge, UK.

Examples

```
data("SDOwave")
str(SDOwave)
```

---

storcap   *EEG Visual Working Memory Storage Capacity*

Description

The data were collected in an experiment on visual working memory storage capacity. The left-right electrode voltages were averaged. The sampling frequency was originally 2 Hz. There were 4 conditions in the experiment: Set Size 1 - Ipsilateral Activity; Set Size 1 - Contralateral Activity; Set Size 3 - Ipsilateral Activity; Set Size 3 - Contralateral Activity. Memory display from 0-300 msec, consolidation period 300-1200 msec, after 1200 msec test period.

Usage

```
data("storcap")
```

Format

A data frame containing the following variables

id Subject ID

channel EEG channel (13 in total)

time Time

cond Experimental conditions

voltage Voltage electrode

Note

Thanks to Hrag Pailian for sharing this dataset.

Examples

```
data("storcap")
str(storcap)
```

---

tension   *Perceived Tension in Music Over Time*

Description

This dataset comes from an experiment described Vines et al. (2006; the data were slightly modified). The authors were interested in how physical gestures of professional musicians contribute to the perception of emotion in a musical performance. 29 participants were exposed to the performance by either just listening (condition "auditory"), just seeing (condition "visual""), or both (condition "auditory-visual"). During the performance the participants had to move a slider to indicate the experienced tension they felt. They listened to the piece for 80 sec; every 10 msec the tension score (0 to 127) was recorded. This results in 800 tension measurement points per person (here provided as z-scores).

Usage

```
data("tension")
```

Format

A data frame with 29 individuals and 800 measurement points. The last column `condition` contains the experimental conditions (auditory, visual, auditory-visual).

Source

Vines, B. W., Krumhansl, C. L., Wanderley, M. M., Levitin, D. J. (2006). Cross-modal interactions in the perception of musical performance. Cognition, 101, 80-113.

Levitin, D. J., Nuzzo, R. L., Wines, B. W., & Ramsay, J. O. (2007). Introduction to functional data analysis. Canadian Psychology, 48, 135-155.

Examples

```
data("tension")
str(tension)
```

Wenchuan   *Wenchuan PTSD Dataset*

Description

PTSD (posttraumatic stress disorder) symptoms reported by survivors of the Wenchuan earthquake in China using the PTSD checklist-civilian version (PCL-C). All items were scaled on a 5-point Likert scale (1 ... not at all; 2 ... a little bit; 3 ... moderately; 4 ... quite a bit; 5 ... extremely).

Usage

```
data("Wenchuan")
```

Format

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

intrusion Repeated, disturbing memories, thoughts, or images of a stressful experience from the past?

dreams Repeated, disturbing dreams of a stressful experience from the past?

flash Suddenly acting or feeling as if a stressful experience were happening again (as if you were reliving it)?

upset Feeling very upset when something reminded you of a stressful experience from the past?

physior Having physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminded you of a stressful experience from the past?

avoidth Avoiding thinking about or talking about a stressful experience from the past or avoiding having feelings related to it?

avoidact Avoiding activities or situations because they reminded you of a stressful experience from the past?

amnesia Trouble remembering important parts of a stressful experience from the past?

lossint Loss of interest in activities that you used to enjoy?

distant Feeling distant or cut off from other people?

numb Feeling emotionally numb or being unable to have loving feelings for those close to you?

future Feeling as if your future will somehow be cut short?

sleep Trouble falling or staying asleep?

anger Feeling irritable or having angry outbursts?

concen Having difficulty concentrating?

hyper Being "super-alert" or watchful or on guard?

startle Feeling jumpy or easily startled?

Source

McNally, R. J., Robinaugh, D. J., Wu, G. W. Y., Wang, L., Deserno, M. K., & Borsboom, D. (2015). Mental disorders as causal systems: A network approach to posttraumatic stress disorder. Clinical Psychological Science, 3(6), 836-849.

Examples

```
data(Wenchuan)
head(Wenchuan)
str(Wenchuan)
```

Wilmer   *Verbal Paired-Associates Memory Test (VPMT)*

Description

Contains data from testmybrain.org within the context of face recognition. It includes the VPMT subscale.

Usage

```
data("Wilmer")
```

Format

A data frame with 1471 individuals, 25 VPMT items, as well as age and gender of the participant.

Source

Wilmer, J. B., Germine, L., Chabris, C. F., Chatterjee, G., Gerbasi, M. & Nakayama, K. (2012): Capturing specific abilities as a window into human individuality: The example of face recognition, Cognitive Neuropsychology, 29, 360-392

Examples

```
data(Wilmer)
str(Wilmer)
```

WilPat   *Wilson-Patterson Conservatism Scale*

Description

This dataset contains a modified version of the classical Wilson-Patterson conservatism scale. Each item has the following response categories: 0 ... disapprove, 1 ... approve, 2 ... don't know.

Usage

```
data("WilPat")
```

Format

The first 15 items are conservative items, the remaining ones are liberal. There are 804 persons in the sample. In addition there are the following covariates:

Country Participant's country.

LibCons Self-reported liberalism/conservatism.

LeftRight Self-reported left/right identification.

Gender Gender.

Age Age.

Note

Thanks to Benedek Kurdi and Levente Littvay for providing this dataset.

Examples

```
data("WilPat")
str(WilPat)
```

---

yaass *YAASS dataset*

Description

Contains 30 participants of which 17 are of high risk psychosis and 13 are healthy controls. We have three variables pertaining to behavioral measures (factor scores): affective empathy (AE), positive social experience (PSE), and perspective taking (PT). Two additional measures come from fMRI scans (right hand fRH and left/right foot fLRF).

Usage

```
data("yaass")
```

Format

A data frame with 30 observations and 6 variables.

Examples

```
data("yaass")
str(yaass)
```

YouthDep *Youth Depression Indicators*

Description

Contains Children's Depression Inventory (CDI) measures of sixth and seventh grade students. In total, there are 26 CDI items (on of the original CDI items asking about suicidal ideation was removed) with three response categories each (e.g., 0 = nobody really loves me, 1 = I am not sure if anybody loves me, or 2 = I am sure that somebody loves me).

Usage

```
data("YouthDep")
```

Format

A data frame with 2290 on the following 27 variables.

CDI1 I am sad all the time

CDI2r Nothing will ever work out for me

CDI3 I do everything wrong

CDI4 Nothing is fun at all

CDI5r I am bad all the time

CDI6 I am sure that terrible things will happen to me

CDI7r I hate myself

CDI8r All bad things are my fault

CDI10r I feel like crying every day

CDI11r Things bother me all the time

CDI12 I do not want to be with people at all

CDI13r I cannot make up my mind about things

CDI14 I look ugly

CDI15r I have to push myself all the time to do my schoolwork

CDI16r I have trouble sleeping every night

CDI17 I am tired all the time

CDI18r Most days I do not feel like eating

CDI19 I do not worry about aches and pains

CDI20 I do not feel alone

CDI21r I never have fun at school

CDI22 I do not have any friends

CDI23 I do very badly in subjects I used to be good in

CDI24r I can never be as good as other kids

CDI25r Nobody really loves me

CDI26 I never do what I am told

CDI27 I get into fights all the time

race Children's race

Source

Vaughn-Coaxum, R. A., Mair, P., & Weisz, J. R. (2015). Racial/ethnic differences in youth depression indicators: An Item Response Theory analysis of symptoms reported by White, Black, Asian, and Latino youths. Clinical Psychological Science, 4, 239-253.

Examples

```
data(YouthDep)
head(YouthDep)
str(YouthDep)
```

---

zareki   *Neuropsychological Test Battery for Number Processing and Calculation in Children*

Description

ZAREKI-R test battery (von Aster et al., 2006) for the assessment of dyscalculia in children. Includes subsets of 8 summation and 8 subtraction items, dichotomously scored, and 2 covariates.

Usage

```
data("zareki")
```

Format

A data frame with 341 and 18 variables. Variables starting with `addit` are summation items, variables starting with `subtr` are subtraction items. `class` denotes elementary school class, `time` the time in min require to complete the test.

Source

Koller, I., & Alexandrowicz, R. W. (2010) Eine psychometrische Analyse der ZAREKI-R mittels Rasch-Modellen [A psychometric analysis of the ZAREKI-R using Rasch-models]. Diagnostica 56, 57-67.

von Aster, M., Weinhold Zulauf, M., & Horn, R. (2006) Neuropsychologische Testbatterie fuer Zahlenverarbeitung und Rechnen bei Kindern (ZAREKI-R) [Neuropsychological Test Battery for Number Processing and Calculation in Children]. Harcourt Test Services, Frankfurt, Germany.

Examples

```
data(zareki)
str(zareki)
```

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