

Package ‘IATanalytics’

June 13, 2018

Type Package

Title Compute Effect Sizes and Reliability for Implicit Association Test (IAT) Data

Version 0.1.1

Author Daniel Storage [aut, cre]

Maintainer Daniel Storage <danielstorage@icloud.com>

Description Quickly score raw data outputted from an Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998) <doi:10.1037/0022-3514.74.6.1464>. IAT scores are calculated as specified by Greenwald, Nosek, and Banaji (2003) <doi:10.1037/0022-3514.85.2.197>. The output of this function is a data frame that consists of four rows containing the following information: (1) the overall IAT effect size for the participant's dataset, (2) the effect size calculated for odd trials only, (3) the effect size calculated for even trials only, and (4) the proportion of trials with reaction times under 300ms (which is important for exclusion purposes). Items (2) and (3) allow for a measure of the internal consistency of the IAT. Specifically, you can use the subsetted IAT effect sizes for odd and even trials to calculate Cronbach's alpha across participants in the sample. The input function consists of three arguments. First, indicate the name of the dataset to be analyzed. This is the only required input. Second, indicate the number of trials in your entire IAT (the default is set to 220, which is typical for most IATs). Last, indicate whether congruent trials (e.g., flowers and pleasant) or incongruent trials (e.g., guns and pleasant) were presented first for this participant (the default is set to congruent). Data files should consist of six columns organized in order as follows: Block (0-6), trial (0-19 for training blocks, 0-39 for test blocks), category (dependent on your IAT), the type of item within that category (dependent on your IAT), a dummy variable indicating whether the participant was correct or incorrect on that trial (0=correct, 1=incorrect), and the participant's reaction time (in milliseconds). A sample dataset (titled 'sampledata') is included in this package to practice with.

License MIT + file LICENSE

Encoding UTF-8

LazyData true

RoxygenNote 6.0.1

Imports stats

NeedsCompilation no

Repository CRAN

Date/Publication 2018-06-13 21:38:10 UTC

R topics documented:

IATanalytics	2
sampledata	3
Index	4

IATanalytics	<i>Function to Analyze Raw Data from an Implicit Association Test (IAT)</i>
--------------	---

Description

This function is designed to analyze raw data from an Implicit Association Test (IAT). The only required input is the name of the dataset, but you can also specify manually the number of trials in your IAT (e.g., for Brief IATs) or whether the participant first saw incongruent category pairings. Refer to the package's DESCRIPTION file for more detailed information (or contact me directly at research@danielstorage.com).

Usage

```
IATanalytics(IAT, Trials, First)
```

Arguments

IAT	The name of the dataset to be analyzed.
Trials	The number of trials across your entire IAT. The default is set to 220, which is typical of most IATs.
First	Whether participants first sorted Congruent or Incongruent trials. The default is set to Congruent.

Examples

```
IATanalytics(sampledata)
IATanalytics(IAT=sampledata)
IATanalytics(sampledata, First="Congruent")
IATanalytics(sampledata, First="Incongruent")
```

`sampledata`*Sample Dataset from a Typical IAT*

Description

This dataset contains sample data from a typically-structured IAT. This IAT has 220 trials, and this particular dataset does not meet criteria for exclusion.

Usage

```
data(sampledata)
```

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 220 rows and 6 columns.

Examples

```
data(sampledata)
```

Index

*Topic **IAT**

IATanalytics, [2](#)

*Topic **datasets**

sampledata, [3](#)

[IATanalytics, 2](#)

[sampledata, 3](#)