Package 'calms'

August 28, 2025

Type Package

Title Comprehensive Analysis of Latent Means

Version 1.0-1

Encoding UTF-8

Date 2025-07-28

Author Kim Nimon [aut, cre],
Julia Fulmore [aut]

Maintainer Kim Nimon <kim.nimon@gmail.com>

Depends R (>= 3.5)

Imports dplyr,DT,foreign,lavaan,lsr,MatchIt,shiny,shinyjs,stringr,bslib

Description Provides a Shiny application to conduct comprehensive analysis of latent means including the examination of group equivalency, propensity score analysis, measurement invariance analysis, and assessment of latent mean differences of equivalent groups with invariant data. Group equivalency and propensity score analyses are implemented using the 'MatchIt' package [Ho et al. (2011) <doi:10.18637/jss.v042.i08>], ensuring robust control for covariates. Structural equation modeling and invariance testing rely heavily on the 'lavaan' package [Rosseel (2012) <doi:10.18637/jss.v048.i02>], providing a flexible and powerful modeling framework. The application also integrates modified functions from Hammack-Brown et al. (2021) <doi:10.1002/hrdq.21452> to support factor ratio testing and the list-and-delete procedure.

Suggests knitr,rmarkdown

License GPL (>= 2)

RoxygenNote 7.3.2

VignetteBuilder knitr

LazyData true

NeedsCompilation no

Repository CRAN

Date/Publication 2025-08-28 09:00:07 UTC

Contents

---

run_calms   *Launch calms User Interface*

Description

run_calms() loads interactive user interface built using R shiny.

Usage

```
run_calms()
```

Details

Start calms

The interactive user interface is to provide an easy way for people who are not comfortable with the R command line system. Includes example data for demonstration.

Value

Nothing

Examples

```
if (interactive()){
run_calms()
}
```

WosDemoMeta   *Meta file for CALMs Demonstration Dataset*

Description

Meta file for CALMs Demonstration Dataset

Usage

```
WosDemoMeta
```

Format

A data frame with 11 rows and 6 variables:

itemo Original item name in dataset

item Item name to be used in CALMs

type Data type: item, cov, group

scale Scale associated with item

ds Name of dataset

missing Numeric value denoting how missing values are coded

Source

Meta file for CALMs demonstration dataset (ISSP Resarch Group, 2017)

Examples

```
data(WosDemoMeta)
head(WosDemoMeta)
```

Index