

Package ‘RSP’

September 24, 2023

Type Package

Title 'shiny' Applications for Statistical and Psychometric Analysis

Version 0.4

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Description Toolbox with 'shiny' applications for widely used psychometric methods. Those methods include following analysis: Item analysis, item response theory calibration, principal component analysis, confirmatory factor analysis - structural equation modeling, generating simulated data.

References:

Chalmers (2012, <[doi:10.18637/jss.v048.i06](https://doi.org/10.18637/jss.v048.i06)>);

Revelle (2022, <<https://CRAN.R-project.org/package=psych> Version = 2.2.9.>);

Rossee (2012, <[doi:10.18637/jss.v048.i02](https://doi.org/10.18637/jss.v048.i02)>);

Magis & Raiche (2012, <[doi:10.18637/jss.v048.i08](https://doi.org/10.18637/jss.v048.i08)>);

Magis & Barrada (2017, <[doi:10.18637/jss.v076.c01](https://doi.org/10.18637/jss.v076.c01)>).

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Encoding UTF-8

RoxygenNote 7.2.3

Imports DT, GPArotation, MVN, Metrics, ShinyItemAnalysis, catR, foreign, gt, hornpa, igraph, lavaan, mirt, plyr, ggplot2, polycor, psych, rJava, semPlot, shinyBS, shinyWidgets, scales, ltm, shinycustomloader, shinyjs, shinythemes, xlsx, shiny, utils, rstudioapi

Depends R (>= 2.10)

Suggests knitr, rmarkdown, testthat (>= 3.0.0)

Config/testthat/edition 3

VignetteBuilder knitr

NeedsCompilation no

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CFA	<i>Testing measurement & structural models for dichotomous and polytomous data</i>
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Description

Testing measurement & structural models for dichotomous and polytomous data

Usage

CFA()

Value

No return value, opens web browser and loads shiny application

Examples

```
## Not run: CFA()
```

FA	<i>Run exploratory factor analysis for dichotomous and polytomous data</i>
----	--

Description

Run exploratory factor analysis for dichotomous and polytomous data

Usage

FA()

Value

No return value, opens web browser and loads shiny application

Examples

```
## Not run: FA()
```

INTERNAL

Run exploratory factor analysis for dichotomous and polytomous data

Description

Run exploratory factor analysis for dichotomous and polytomous data

Usage

INTERNAL()

Value

No return value, opens web browser and loads shiny application

Examples

```
## Not run: FA()
```

IRT

Item calibration according to item response theory models

Description

Item calibration according to item response theory models

Usage

IRT()

Value

No return value, opens web browser and loads shiny application

Examples

```
## Not run: IRT()
```

ITEMAN

Item and test statistics based on classical test theory,

Description

Item and test statistics based on classical test theory,

Usage

ITEMAN()

Value

No return value, opens web browser and loads shiny application

Examples

```
## Not run: ITEMAN()
```

PCA

Run principal component analysis for dichotomous and polytomous data

Description

Run principal component analysis for dichotomous and polytomous data

Usage

PCA()

Value

No return value, opens web browser and loads shiny application

Examples

```
## Not run: PCA()
```

SIMDATA	<i>Generate simulated data according to IRT for dichotomous and polytomous data Generate multidimensional data for factor analysis # param options(java.parameters = "-Xmx8000m")</i>
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Description

Generate simulated data according to IRT for dichotomous and polytomous data Generate multidimensional data for factor analysis # param options(java.parameters = "-Xmx8000m")

Usage

```
SIMDATA()
```

Value

No return value, opens web browser and loads shiny application

Examples

```
## Not run: SIMDATA()
```

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