# Package: RSP (via r-universe)

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**Type** Package

**Title** 'shiny' Applications for Statistical and Psychometric Analysis

**Version** 1.0.0

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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>); Revelle (2022, <https://CRAN.R-project.org/package=psych Version = 2.2.9.>); Rosseel (2012, <doi:10.18637/jss.v048.i02>); Magis & Raiche (2012, <doi:10.18637/jss.v048.i08>); Magis & Barrada (2017, <doi:10.18637/jss.v076.c01>).

**License** GPL-3

**Encoding** UTF-8

**RoxygenNote** 7.3.3

**Imports** DT, GPArotation, MVN (>= 6.0), Metrics, ShinyItemAnalysis, catR, cowplot, foreign, gt, hornpa, htmlwidgets, igraph, lavaan, mirt, openxlsx, patchwork, plotly, plyr, ggplot2, polycor, psych, rJava, semPlot, shinyBS, shinyWidgets, scales, tidyselect, visNetwork, 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

**Repository** https://cran.r-universe.dev

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**RemoteUrl** https://github.com/cran/RSP

**RemoteRef** HEAD

**RemoteSha** ab7d3bd15a1542df771de804db39935a6e50b745

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`CFA` *Testing measurement & structural models for dichotomous and polytomous data*

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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 *Run exploratory factor analysis for dichotomous and polytomous data*

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

## 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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