# Package: RSP (via r-universe)

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**Type** Package

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

**Version** 0.4

**Maintainer** Eren Can Aybek <erencan@aybek.net>

**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** 7.2.3

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

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

**RemoteRef** HEAD

**RemoteSha** 70456c1205a50f8380f38a56f3d61ab46bed6365

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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()
```

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| PCA | *Run principal component analysis for dichotomous and polytomous data* |
|---|---|

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### 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()
```

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

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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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