

# Package ‘SIAmModules’

March 29, 2023

**Type** Package

**Title** Modules for 'ShinyItemAnalysis'

**Version** 0.1.0

**Date** 2023-03-27

**Description** Package including additional modules for interactive 'ShinyItemAnalysis' application for the psychometric analysis of educational tests, psychological assessments, health-related and other types of multi-item measurements, or ratings from multiple raters.

**License** GPL-3

**URL** <http://www.ShinyItemAnalysis.org>

**Depends** R (>= 3.5.0)

**Imports** cli, difNLR, dplyr, DT, forcats, ggplot2, glue, lme4, magrittr, mirt, mirtCAT, plotly, purrr, rlang, scales, shiny, ShinyItemAnalysis, shinyjs, stringr, tibble, tidyr, yaml

**Encoding** UTF-8

**RoxygenNote** 7.2.3

**Config/ShinyItemAnalysis/module** true

**NeedsCompilation** no

**Author** Patricia Martinkova [aut, cre]  
(<https://orcid.org/0000-0003-4754-8543>),  
Jan Netik [aut] (<https://orcid.org/0000-0002-3888-3203>)

**Maintainer** Patricia Martinkova <martinkova@cs.cas.cz>

**Repository** CRAN

**Date/Publication** 2023-03-29 08:00:05 UTC

## R topics documented:

read_me . . . . .	2
sm_cat . . . . .	2
sm_dif_c . . . . .	3
sm_irr . . . . .	3

**Index****5**

---

read_me	<i>How to use this package</i>
---------	--------------------------------

---

**Description**

Prints information on how to use the modules included in the package. You may have already seen the same information when loading the package.

**Usage**

```
read_me()
```

**Details**

The printed message also displays hyperlinks to each module's help page, where you can find more detailed information, including the citation entry.

Note that if your console does not support hyperlinks, modules titles will be accompanied by a regular R code you may paste into your console to arrive at the same help page.

**Value**

An object of class `siamod_readme`. Called for side effects.

**Examples**

```
read_me()
```

---

sm_cat	<i>Interactive Module for Computerized Adaptive Tests</i>
--------	---

---

**Description**

Interactive illustration of computerized adaptive test (CAT) with the `mirrCAT` package.

**Author(s)**

Jan Netik  
Institute of Computer Science of the Czech Academy of Sciences  
[netik@cs.cas.cz](mailto:netik@cs.cas.cz)

Patricia Martinkova  
Institute of Computer Science of the Czech Academy of Sciences  
[martinkova@cs.cas.cz](mailto:martinkova@cs.cas.cz)

**See Also**

Other SIAModules: [sm\\_dif\\_c](#), [sm\\_irr](#)

---

sm\_dif\_c

*Interactive Module for Differential Item Functioning in Change (DIF-C)*

---

**Description**

Interactive illustration of Differential Item Functioning in Change (DIF-C).

**Author(s)**

Jan Netik  
Institute of Computer Science of the Czech Academy of Sciences  
[netik@cs.cas.cz](mailto:netik@cs.cas.cz)

Patricia Martinkova  
Institute of Computer Science of the Czech Academy of Sciences  
[martinkova@cs.cas.cz](mailto:martinkova@cs.cas.cz)

Adela Hladka  
Institute of Computer Science of the Czech Academy of Sciences  
<hladka@cs.cas.cz>

**See Also**

Other SIAModules: [sm\\_cat](#), [sm\\_irr](#)

---

sm\_irr

*Interactive Module for Range-restricted Reliability*

---

**Description**

Interactive illustration of range-restricted reliability issue and the difficulties with maximum likelihood estimation, described in more detail in the context of inter-rater reliability in grant proposal review.

**Author(s)**

Jan Netik  
Institute of Computer Science of the Czech Academy of Sciences  
[netik@cs.cas.cz](mailto:netik@cs.cas.cz)

Patricia Martinkova  
Institute of Computer Science of the Czech Academy of Sciences  
[martinkova@cs.cas.cz](mailto:martinkova@cs.cas.cz)

Elena A. Erosheva University of Washington  
Carole J. Lee University of Washington

**References**

Erosheva, E., Martinkova, P., & Lee, C. (2021). When zero may not be zero: A cautionary note on the use of inter-rater reliability in evaluating grant peer review. *Journal of the Royal Statistical Society – Series A*, 184(3), 904–919. doi:10.1111/rssa.12681

**See Also**

Other SIAModules: [sm\\_cat](#), [sm\\_dif\\_c](#)

# Index

## \* SIAModules

sm\_cat, 2

sm\_dif\_c, 3

sm\_irr, 3

read\_me, 2

sm\_cat, 2, 3, 4

sm\_dif\_c, 2, 3, 4

sm\_irr, 2, 3, 3