Package 'lisrelToR'

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Type Package

Title Import Output from LISREL into R

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Depends R (>= 2.15.0)

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Description This is an unofficial package aimed at automating the import of LISREL output in R. This package or its maintainer is not in any way affiliated with the creators of LISREL and SSI, Inc.

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R topics documented:

`lisrelToR-package` *Import LISREL output in R.*

Description

This is an unofficial package aimed at automating the import of LISREL output in R. This package or its maintainer is not in any way affiliated with the creators of LISREL and SSI, Inc.

Author(s)

Sacha Epskamp (mail@sachaepskamp.com)

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References

github.com/SachaEpskamp/lisrelToR

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lisrel-methods *Methods for lisrel objects*

Description

Print method prints LISREL output file to the console, summary method returns RAM of parameter estimates as given by `semPlotModel` from the `semPlot` package and plot method calls `semPaths` from the `semPlot` package.

Usage

```
## S3 method for class 'lisrel'
print(x, ...)
```

Arguments

`x`	output of `readLisrel`
`...`	Not used

Author(s)

Sacha Epskamp <mail@sachaepskamp.com>

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lisrelMatrix *Extract LISREL matrices from* `lisrel` *object.*

Description

This function can be used to extract matrices from the output of `readLisrel`.

Usage

```
lisrelMatrix(object, matrix, group = 1, type = "est")
```

Arguments

`object`	A `"lisrel"` object obtained by `readLisrel`.
`matrix`	Specification of the matrix to be extracted. See details.
`group`	An integer specifying which group the matrix should be extracted from.
`type`	Specification of the type of matrix to be extracted.

Details

`LisrelToR` uses the following names for the model matrices:

LY Lambda-Y matrix.

PS Psi matrix.

BE Beta matrix.

TE Theta-Epsilon matrix.

TY Tau-Y matrix.

AL Alpha matrix.

LX Lambda-X matrix.

PH Phi matrix.

GA Gamma matrix.

TD Theta-Delta matrix.

TX Tau-X matrix.

KA Kappa

ObsCovs The observed covariance matrix, or a list of such matrices for each group.

ImpCovs The implied covariance matrix, or a list of such matrices for each group.

Furthermore, `lisrelToR` uses the following names for matrix types:

est Parameter estimates

se Standard errors

t t-values

parSpec Parameter numbers

Value

A matrix.

Author(s)

Sacha Epskamp <mail@sachaepskamp.com>

References

Joreskog, K. G., & Sorbom, D. (1996). LISREL 8 user's reference guide. Scientific Software.

See Also

readLisrel

Examples

```
## Measurment invariance example:
modFile <- system.file("extdata", "mi1.OUT", package = "lisrelToR")
Lis <- readLisrel(modFile)

# Extract Lambda-Y for group 2:
lisrelMatrix(Lis,"LY", group = 2)
```

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readLisrel *Read LISREL matrices into R*

Description

This function scans LISREL (Joreskog & Sorbom, 1996) output for model matrices and fit indices.

Usage

```
readLisrel(x)
```

Arguments

x	String indicating the location of a LISREL output file.

Details

LisrelToR uses the following names for the model matrices:

LY Lambda-Y matrix.

PS Psi matrix.

BE Beta matrix.

TE Theta-Epsilon matrix.

TY Tau-Y matrix.

AL Alpha matrix.

LX Lambda-X matrix.

PH Phi matrix.

GA Gamma matrix.

TD Theta-Delta matrix.

TX Tau-X matrix.

KA Kappa

ObsCovs The observed covariance matrix, or a list of such matrices for each group.

ImpCovs The implied covariance matrix, or a list of such matrices for each group.

Furthermore, `lisrelToR` uses the following names for matrix types:

est Parameter estimates

se Standard errors

t t-values

parSpec Parameter numbers

Value

A list of class `"lisrel"` contaning:

`fitIndices`	Fit indices, currently not supported.
`matrices`	A list contaning the model matrices. For each group this list conains a list with for each matrix (using LISREL style naming, see details) a list contaning elements `est` for parameter estimates, `se` for standard errors, `t` for t-values and `parSpec` for parameter numbers. Use `lisrelMatrix` to extract the matrices.
`variables`	Currently not used.
`Covariances`	A list with elements `implied` and `observed` containing the implied and observed covariance matrices.

Author(s)

Sacha Epskamp <mail@sachaepskamp.com>

References

Joreskog, K. G., & Sorbom, D. (1996). LISREL 8 user's reference guide. Scientific Software.

See Also

`lisrelMatrix`

Examples

```
## Measurment invariance example:
modFile <- system.file("extdata", "mi1.OUT", package = "lisrelToR")
Lis <- readLisrel(modFile)

# Extract Lambda-Y for group 2:
lisrelMatrix(Lis,"LY", group = 2)

# Structure of object:
str(Lis)

# Print full LISREL output to console:
print(Lis)
```

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