# Package 'MplusReadR'

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**Title** Tabulate and Format Mplus Output

**Version** 0.0.0.9000

**Imports** MplusAutomation, htmlTable, dplyr, magrittr

**Description** The MplusReadR package formulates MPlus output into APA-formatted tables, ready for inclusion in scientific publications. Users can adjust the variables and parameters displayed. It also includes helper functions which check whether models converged, and indicates what variables and parameters are available.

**License** `use_mit_license()`

**Encoding** UTF-8

**LazyData** true

**Roxygen** list(markdown = TRUE)

**RoxygenNote** 7.1.1

**Suggests** testthat

## R topics documented:



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`apa_table` *APA-style Mplus Tables*

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### Description

Creates APA-style tables containing output from multiple Mplus objects.

### Usage

```
apa_table(tidy_data, model_type)
```

### Arguments

| | |
|---|---|
| tidy_data | A tidy dataset of Mplus models, created by tidy_compile() |
| model_type | One of 'null', 'univariate', or 'bivariate'. |

### Value

APA-style table of Mplus output.

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## model_converge *Check Model Convergence*

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### Description

Determines whether any of the Mplus models did not converge. Models that do not converge will not report confidence intervals. This is used to determine whether a model converged.

### Usage

```
model_converge(Mplus_file)
```

### Arguments

| | |
|---|---|
| Mplus_file | An Mplus object generated by the Mplus Automation package from Mplus output using the readModels function. This can contain multiple models. |

### Value

A tidy dataset indicating whether each of the models converged.

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## mplus_compile *Compile Mplus Data*

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### Description

Creates a tidy dataset containing analyses from multiple Mplus objects. This can then be used in the mplus_apa_table() function, or can be saved separately.

### Usage

```
mplus_compile(
  Mplus_file,
  rounding = 2,
  param_header = NULL,
  parameter = NULL,
  display = "all",
  standardized = TRUE,
  converged = TRUE
)
```

### Arguments

| | |
|---|---|
| Mplus_file | An mplus object generated by the Mplus Automation package from Mplus output using the MplusAutomation::readModels() function. |
| rounding | a value between 0 and 3. Defaults to 2. |
| param_header | parameter headers from the Mplus output. Exact parameter headers can be found using mplus_check_parameters(). For null models, defaults to New.Additional.Parameters. For univariate and bivariate models, defaults to Z.ON and R2. |
| parameter | parameters in the Mplus output, without the variable name at the start e.g. NAMEAN is MEAN, NASDW is SDW. Must be in capitals, and exactly like it is in the original output. These can be found using mplus_check_parameters(). Defaults to all available parameters. |
| display | How many columns should be displayed. Choose from "all", "minimal", "descriptives" or manually specify which columns should be displayed. |
| converged | If TRUE, removes non-converged models. |
| standardised | Whether standardised or unstandardised output should be used for univariate and bivariate models. Defaults to TRUE. |

### Value

A tibble containing specified variables and parameters from multiple Mplus models.

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## remove_no_converge *Remove Non-Converged Models*

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### Description

Checks whether any models in the list of Mplus models did not converge, and removes those that did not converge.

### Usage

```
remove_no_converge(Mplus_model)
```

### Arguments

| | |
|---|---|
| Mplus_file | An Mplus object generated by the Mplus Automation package from Mplus output using the readModels function. This can contain multiple models. |

### Value

The original Mplus output excluding the non-converged models.

### See Also

model_converge

## tidy_bivar *Extract Variables from Bivariate Models*

### Description

Extracts specified parameters and variables from a singular Mplus bivariate model.

### Usage

```
tidy_bivar(Mplus_file, model_n = 1, standardised = TRUE)
```

### Arguments

| | |
|---|---|
| Mplus_file | An Mplus object generated by the Mplus Automation package from Mplus output using the readModels function. Can contain multiple MPlus files. |
| model_n | If a Mplus object contains more than one model, this determines which model to select. Defaults to 1. |

### Value

A tibble containing the name of the dataset, paramheaders, parameters, point estimates, CIs, and names of outcome and predictor variables.

### See Also

readModels

## tidy_compile *Compile Mplus Data*

### Description

Creates a tidy dataset containing analyses from multiple Mplus objects. This can then be used in the mplus_apa_table() function, or can be saved separately.

### Usage

```
tidy_compile(
  Mplus_file,
  model_type,
  rounding = 2,
  parameters = NULL,
  variables = NULL,
  paramheaders = NULL,
  outcomes = NULL,
  standardised = TRUE
)
```

### Arguments

| | |
|---|---|
| Mplus_file | An mplus object generated by the Mplus Automation package from Mplus output using the MplusAutomation::readModels() function. |
| model_type | One of 'null', 'univariate', or 'bivariate'. |
| rounding | a value between 0 and 3. Defaults to 2. |
| parameters | parameters in the Mplus output, without the variable name at the start e.g. NAMEAN is MEAN, NASDW is SDW. Must be in capitals, and exactly like it is in the original output. These can be found using mplus_check_parameters(). Defaults to all available parameters. |
| variables | Variables from the Mplus output. Exact variable names can be found using mplus_check_parameters(). Defaults to all available variables. |
| paramheaders | parameter headers from the Mplus output. Exact parameter headers can be found using mplus_check_parameters(). For null models, defaults to New.Additional.Parameters. For univariate and bivariate models, defaults to Z.ON and R2. |
| outcomes | Outcome variables in the Mplus output. Available outcomes can be found using mplus_check_parameters(). Defaults to all outcomes. |
| standardised | Whether standardised or unstandardised output should be used for univariate and bivariate models. Defaults to TRUE. |

### Value

A tibble containing specified variables and parameters from multiple Mplus models.

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## tidy_null *Extract Variables from Null Models*

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### Description

Extracts specified parameters and variables from a singular Mplus null model.

### Usage

```
tidy_null(Mplus_file, model_n = 1)
```

### Arguments

| | |
|---|---|
| Mplus_file | An Mplus object generated by the Mplus Automation package from Mplus output using the MplusAutomation::readModels() function. Can contain multiple MPlus files. |
| model_n | If a Mplus object contains more than one model, this determines which model to select. Defaults to 1. |

### Value

A tibble containing the name of the dataset, paramheaders, total number of observations and participants, parameters, point estimates, CIs, and variable names.

### See Also

readModels

`tidy_univar` *Extract Variables from Univariate Models*

## Description

Extracts specified parameters and variables from a singular Mplus univariate model.

## Usage

```
tidy_univar(Mplus_file, model_n = 1, standardised = TRUE)
```

## Arguments

| | |
|---|---|
| `Mplus_file` | An Mplus object generated by the Mplus Automation package from Mplus output using the `readModels` function. Can contain multiple MPlus files. |
| `model_n` | If a Mplus object contains more than one model, this determines which model to select. Defaults to 1. |

## Value

A tibble containing the name of the dataset, paramheaders, parameters, point estimates, CIs, and names of outcome and predictor variables.

## See Also

`readModels`

# Index