Package 'jmvReadWrite'

August 15, 2021

Title Read and Write 'jamovi' Files ('.omv')

Version 0.2.1

Description The free and open a statistical spreadsheet 'jamovi' (www.jamovi.org) aims to make statistical analyses easy and intuitive. 'jamovi' produces syntax that can directly be used in R (in connection with the R-package 'jmv'). Having import / export routines for the data files 'jamovi' produces ('.omv') permits an easy transfer of analyses between 'jamovi' and R.

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Encoding UTF-8

LazyData true

Roxygen list(markdown = TRUE)

RoxygenNote 7.1.1

VignetteBuilder knitr

BugReports https://github.com/sjentsch/jmvReadWrite/issues

Depends R (>= 3.5.0)

Imports rjson,
jmvcore,
RProtoBuf,
foreign

Suggests jmv,
knitr,
rmarkdown

R topics documented:

bfi_sample	*The data set contains responses from 250 participants filling in twenty-five personality self-report items taken from the International Personality Item Pool (http://ipip.ori.org) as part of the Synthetic Aperture Personality Assessment (SAPA) web-based personality assessment (http://sapa-project.org) project. The 25 items are organized by five putative factors: Agreeableness (A1 to A5), Conscientiousness (C1 to C5), Extraversion (E1 to E5), Neuroticism (N1 to N5), and Openness (N1 to N5). The items were short phrases that the respondent should answer by indicating how accurately the statement describes their typical behaviour or attitude. Responses were collected using a 6-point scale: 1 - Very inaccurate, 2 - Moderately inaccurate, 3 - Slightly inaccurate, 4 - Slightly accurate, 5 - Moderately accurate, 6 - Very accurate.*

Description

The data set contains responses from 250 participants filling in twenty-five personality self-report items taken from the International Personality Item Pool (http://ipip.ori.org) as part of the Synthetic Aperture Personality Assessment (SAPA) web-based personality assessment (http://sapa-project.org) project. The 25 items are organized by five putative factors: Agreeableness (A1 to A5), Conscientiousness (C1 to C5), Extraversion (E1 to E5), Neuroticism (N1 to N5), and Openness (N1 to N5). The items were short phrases that the respondent should answer by indicating how accurately the statement describes their typical behaviour or attitude. Responses were collected using a 6-point scale: 1 - Very inaccurate, 2 - Moderately inaccurate, 3 - Slightly inaccurate, 4 - Slightly accurate, 5 - Moderately accurate, 6 - Very accurate.

Usage

```
bfi_sample
```

Format

A data.frame with 254 rows (250 original respondents, 4 manually generated (for testing)) and 33 variables

ID characterRepondent ID

A1 integerAm indifferent to the feelings of others. (reversed)

A2 integerInquire about others' well-being.

A3 integerKnow how to comfort others.

A4 integerLove children.

A5 integerMake people feel at ease.

C1 integerAm exacting in my work.

C2 integerContinue until everything is perfect.

C3 integerDo things according to a plan.

C4 integerDo things in a half-way manner. (reversed)

C5 integerWaste my time. (reversed)

E1 integerDon't talk a lot. (reversed)

E2 integerFind it difficult to approach others. (reversed)

E3 integerKnow how to captivate people.

E4 integerMake friends easily.

E5 integerTake charge.

N1 integerGet angry easily.

N2 integerGet irritated easily.

N3 integerHave frequent mood swings.

N4 integerOften feel blue.

N5 integerPanic easily.

O1 integerAm full of ideas.

O2 integerAvoid difficult reading material. (reversed)

O3 integerCarry the conversation to a higher level.

O4 integerSpend time reflecting on things.

O5 integerWill not probe deeply into a subject. (reversed)

gender factorGender of the respondent (female, male)

age integerAge of the respondent (years)

AD numericExponent of age (computed: EXP(age))

AF factorRandom data (for testing)

AG factorRandom data (for testing)

age_tr factorAge of the respondent (transformed, as decades: 1 - 10-19, 2 - 20-29, 3 - 30-39, 4 - 40-49, 5 - 50-59, 6 - 60 and over)

ID2 characterRespondent ID (for testing; "A" + random-generated 5-digit-code)

`bfi_sample2`

The data set contains responses from 250 participants filling in twenty-five personality self-report items taken from the International Personality Item Pool (https://ipip.ori.org) as part of the Synthetic Aperture Personality Assessment (SAPA) web-based personality assessment (https://sapa-project.org) project. The 25 items are organized by five putative factors: Agreeableness (A1 to A5), Conscientiousness (C1 to C5), Extraversion (E1 to E5), Neuroticism (N1 to N5), and Openness (N1 to N5). The items were short phrases that the respondent should answer by indicating how accurately the statement describes their typical behaviour or attitude. Responses were collected using a 6-point scale: 1 - Very inaccurate, 2 - Moderately inaccurate, 3 - Slightly inaccurate, 4 - Slightly accurate, 5 - Moderately accurate, 6 - Very accurate. The data set includes the jamovi-attributes. It is supposed to result in an identical file compared to the bfi_sample2.omv-file contained in the extdata-directory of the package when written with write_jmv.

Description

The data set contains responses from 250 participants filling in twenty-five personality self-report items taken from the International Personality Item Pool (https://ipip.ori.org) as part of the Synthetic Aperture Personality Assessment (SAPA) web-based personality assessment (https://sapa-project.org) project. The 25 items are organized by five putative factors: Agreeableness (A1 to A5), Conscientiousness (C1 to C5), Extraversion (E1 to E5), Neuroticism (N1 to N5), and Openness (N1 to N5). The items were short phrases that the respondent should answer by indicating how accurately the statement describes their typical behaviour or attitude. Responses were collected using a 6-point scale: 1 - Very inaccurate, 2 - Moderately inaccurate, 3 - Slightly inaccurate, 4 - Slightly accurate, 5 - Moderately accurate, 6 - Very accurate. The data set includes the jamovi-attributes. It is supposed to result in an identical file compared to the bfi_sample2.omv-file contained in the extdata-directory of the package when written with write_jmv.

Usage

```
bfi_sample2
```

Format

A data.frame with 250 rows and 29 variables

ID characterRepondent ID

A1 integerAm indifferent to the feelings of others. (reversed)

A2 integerInquire about others' well-being.

A3 integerKnow how to comfort others.

A4 integerLove children.

A5 integerMake people feel at ease.

C1 integerAm exacting in my work.

C2 integerContinue until everything is perfect.

C3 integerDo things according to a plan.

C4 integerDo things in a half-way manner. (reversed)

C5 integerWaste my time. (reversed)

E1 integerDon't talk a lot. (reversed)

E2 integerFind it difficult to approach others. (reversed)

E3 integerKnow how to captivate people.

E4 integerMake friends easily.

E5 integerTake charge.

N1 integerGet angry easily.

N2 integerGet irritated easily.

N3 integerHave frequent mood swings.

N4 integerOften feel blue.

N5 integerPanic easily.

O1 integerAm full of ideas.

O2 integerAvoid difficult reading material. (reversed)

O3 integerCarry the conversation to a higher level.

O4 integerSpend time reflecting on things.

O5 integerWill not probe deeply into a subject. (reversed)

gender factorGender of the respondent (female, male)

age integerAge of the respondent (years)

ID2 characterRespondent ID (for testing; "A" + random-generated 4-digit-code)

`read_jmv` *Read files created of the statistical spreadsheet 'jamovi' (www.jamovi.org)*

Description

Read files created of the statistical spreadsheet 'jamovi' (www.jamovi.org)

Usage

```
read_jmv(
  fleNme = "",
  useFlt = FALSE,
  rmMsVl = FALSE,
  sveAtt = FALSE,
  getSyn = FALSE,
  getHTM = FALSE
)
```

Arguments

`fleNme`	name (incl. path) of the 'jamovi'-file to be read ("FILENAME.omv"; default = "")
`useFlt`	apply filters (remove the lines where the filter is set to 0; default: FALSE)
`rmMsVl`	remove values defined as missing values (replace them with NA; default - FALSE)
`sveAtt`	store attributes that are not required in the data set (if you want to write the same data set using write_jmv; default – FALSE)
`getSyn`	extract syntax from the analyses in the 'jamovi'-file and store it in the attribute 'syntax' (default – FALSE)
`getHTM`	store index.html in the attribute 'HTML' (default – FALSE)

Value

data frame (can be directly used with functions included in the R-package 'jmv' and syntax from 'jamovi'; also compatible with the format of the R-package "foreign")

Examples

```
## Not run:
library(jmvReadWrite)
fleOMV = system.file("extdata", "ToothGrowth.omv", package = "jmvReadWrite")
data = read_jmv(fleNme = fleOMV, getSyn = TRUE)
# shows the syntax of the analyses from the .omv-file
attr(data, 'syntax')
# runs the command of the first analysis
eval(parse(text=attr(data, 'syntax')[[1]]))
# runs the command of the second analysis and assigns the output from that analysis
# to the variable result2
eval(parse(text=paste0('result2 = ', attr(data, 'syntax')[[2]])))
names(result2)
# → "main"    "assump"   "contrasts" "postHoc"  "emm" (the names of the five output tables)

## End(Not run)
```

`sps2jmv` *Converts SPPS-syntax (either from a SPSS-syntax file .sps or read from a SPSS-output-file .spv using spv2sps) into jamovi / jmv-syntax*

Description

The function expects that either the parameter lstSPS with the output from spv2sps; otherwise the list has to have identical format – see below is used or that both fleSPS and fleSAV are given.

Usage

```
sps2jmv(lstSPS = list(), fleSPS = "", fleSAV = "")
```

Arguments

`list`	with SPSS-commands, the format is supposed to be the same as what is output from spv2sps (a list containing one command per entry, the command being a character vector, and the attribute 'datafile' with a character vector containing the position of the SPSS-data-file incl. path; if not found at the path, the file is searched in the current directory)
`position`	of a SPSS-data-file .sav; incl. path

Value

list with jamovi / jmv-analysis-function-calls and the data set stored in the attribute 'dataset'

spv2sps — *Reads SPSS output files (.spv) and extracts the syntax and the data file used in the analyses from them*

Description

Reads SPSS output files (.spv) and extracts the syntax and the data file used in the analyses from them

Usage

```
spv2sps(fleSPV = "", rmvInv = FALSE)
```

Arguments

fleSPV	name (incl. path) of the SPSS-output-file to be read ("FILENAME.spv"; default = "")

Value

list with SPSS commands (like what is typically stored in SPSS syntax files - .sps); the list contains one command per entry (the command being a character vector) and the position of the SPSS-data-file incl. path that was used in the analyses is stored as a character vector in the attribute 'datafile' (the attribute will be empty if either the SPSS-datafile used in the analyses was not stored or if there was more than one data file used in the analyses stored in the original .spv-file

ToothGrowth — *The Effect of Vitamin C on Tooth Growth in Guinea Pigs*

Description

The Effect of Vitamin C on Tooth Growth in Guinea Pigs

Usage

```
ToothGrowth
```

Format

A data.frame with 60 rows and 6 variables

logLen numericNatural logarithm of the tooth length (len)

supp - Transform 1 factorTransformation of the supplement type (factor to numerical: VC = 1; OJ = 2)

len numericTooth length

supp factorSupplement type (VC: Vitamin C or OJ: Orange juice)

dose numericDose in grams / day

write_jmv *Write files to be used with the statistical spreadsheet 'jamovi' (www.jamovi.org)*

Description

Write files to be used with the statistical spreadsheet 'jamovi' (www.jamovi.org)

Usage

```
write_jmv(dtaFrm = NULL, fleNme = "")
```

Arguments

dtaFrm	Data frame to be exported (default = NULL)
fleNme	Name / position of the output file to be generated ("FILENAME.omv"; default = "")

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