Package ‘jmvReadWrite’

September 20, 2021

Title Read and Write ‘jamovi’ Files (’.omv’)
Version 0.2.2
Description The free and open 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.
License AGPL-3
Encoding UTF-8
LazyData true
RoxygenNote 7.1.2
VignetteBuilder knitr
Language en-GB
URL https://sjentsch.github.io/jmvReadWrite/
BugReports https://github.com/sjentsch/jmvReadWrite/issues
Depends R (>= 3.5.0)
Imports rjson
Suggests jmv, jmvcore, knitr, rmarkdown, RProtoBuf
NeedsCompilation no
Author Sebastian Jentschke [aut, cre]
  (<https://orcid.org/0000-0003-2576-5432>)
Maintainer Sebastian Jentschke <sebastian.jentschke@uib.no>
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R topics documented:

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Imagine that you worked for a record company and that your boss was interested in predicting album sales from advertising.

**Description**

The data set is fictional and was constructed by Andy Field who therefore owns the copyright. The data set is also publicly available on the website that accompanies Andy Field’s book, https://edge.sagepub.com/field5e. Without Andy Field’s explicit consent, this data set may not be distributed for commercial purposes, this data set may not be edited, and this data set may not be presented without acknowledging its source (i.e., the terms of a CC BY-NC-ND license).

**Usage**

AlbumSales

**Format**

A data.frame with 60 rows, each one representing a different album, and 5 variables

- **Adverts** numeric Amount (in thousands of pounds) spent promoting the album before release
- **Airplay** integer How many times songs from the album were played on a prominent national radio station in the week before release
- **Image** integer How attractive people found the band’s image (out of 10)
- **Sales** integer Sales (in thousands) of each album in the week after release

**Details**

### 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.

### Usage

bfi_sample

### Format

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

<table>
<thead>
<tr>
<th>ID</th>
<th>Character</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID</td>
<td>character</td>
<td>Respondent ID</td>
</tr>
<tr>
<td>A1</td>
<td>integer</td>
<td>Am indifferent to the feelings of others. (reversed)</td>
</tr>
<tr>
<td>A2</td>
<td>integer</td>
<td>Inquire about others’ well-being.</td>
</tr>
<tr>
<td>A3</td>
<td>integer</td>
<td>Know how to comfort others.</td>
</tr>
<tr>
<td>A4</td>
<td>integer</td>
<td>Love children.</td>
</tr>
<tr>
<td>A5</td>
<td>integer</td>
<td>Make people feel at ease.</td>
</tr>
<tr>
<td>C1</td>
<td>integer</td>
<td>Am exacting in my work.</td>
</tr>
<tr>
<td>C2</td>
<td>integer</td>
<td>Continue until everything is perfect.</td>
</tr>
<tr>
<td>C3</td>
<td>integer</td>
<td>Do things according to a plan.</td>
</tr>
<tr>
<td>C4</td>
<td>integer</td>
<td>Do things in a half-way manner. (reversed)</td>
</tr>
<tr>
<td>C5</td>
<td>integer</td>
<td>Waste my time. (reversed)</td>
</tr>
<tr>
<td>E1</td>
<td>integer</td>
<td>Don’t talk a lot. (reversed)</td>
</tr>
<tr>
<td>E2</td>
<td>integer</td>
<td>Find it difficult to approach others. (reversed)</td>
</tr>
<tr>
<td>E3</td>
<td>integer</td>
<td>Know how to captivate people.</td>
</tr>
<tr>
<td>E4</td>
<td>integer</td>
<td>Make friends easily.</td>
</tr>
<tr>
<td>E5</td>
<td>integer</td>
<td>Take charge.</td>
</tr>
<tr>
<td>N1</td>
<td>integer</td>
<td>Get angry easily.</td>
</tr>
</tbody>
</table>
N2 integer Get irritated easily.
N3 integer Have frequent mood swings.
N4 integer Often feel blue.
N5 integer Panic easily.
O1 integer Am full of ideas.
O2 integer Avoid difficult reading material. (reversed)
O3 integer Carry the conversation to a higher level.
O4 integer Spend time reflecting on things.
O5 integer Will not probe deeply into a subject. (reversed)
gender factor Gender of the respondent (female, male)
age integer Age of the respondent (years)
AD numeric Exponent of age (computed: EXP(age))
AF factor Random data (for testing)
AG factor Random data (for testing)
age_tr factor Age of the respondent (transformed, as decades: 1 - 10-29, 2 - 30-39, 3 - 40-49, 5 - 50-59, 6 - 60 and over)
ID2 character Respondent ID (for testing; "A" + random-generated 5-digit-code)

bfi_sample2

Twenty-five personality self-report items taken from the International Personality Item Pool (includes jamovi-attributes; should result in a file identical to bfi_sample2.omv under "extdata" when written with write_omv)

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_omv.

Usage

bfi_sample2
Format

A data frame with 250 rows and 29 variables

ID character Respondent ID
A1 integer Am indifferent to the feelings of others. (reversed)
A2 integer Inquire about others’ well-being.
A3 integer Know how to comfort others.
A4 integer Love children.
A5 integer Make people feel at ease.
C1 integer Am exacting in my work.
C2 integer Continue until everything is perfect.
C3 integer Do things according to a plan.
C4 integer Do things in a half-way manner. (reversed)
C5 integer Waste my time. (reversed)
E1 integer Don’t talk a lot. (reversed)
E2 integer Find it difficult to approach others. (reversed)
E3 integer Know how to captivate people.
E4 integer Make friends easily.
E5 integer Take charge.
N1 integer Get angry easily.
N2 integer Get irritated easily.
N3 integer Have frequent mood swings.
N4 integer Often feel blue.
N5 integer Panic easily.
O1 integer Am full of ideas.
O2 integer Avoid difficult reading material. (reversed)
O3 integer Carry the conversation to a higher level.
O4 integer Spend time reflecting on things.
O5 integer Will not probe deeply into a subject. (reversed)
gender factor Gender of the respondent (female, male)
age integer Age of the respondent (years)
ID2 character Respondent ID (for testing: "A" + random-generated 4-digit-code)
read_omv

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

Arguments

fleNme  name (including the path, if required) of the 'jamovi'-file to be read ("FILE-NAME.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_omv; 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_omv(fleNme = fleOMV, getSyn = TRUE);
if (length(attr(data, 'syntax')) >= 1) {
}
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 numeric Natural logarithm of the tooth length (len)

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

len numeric Tooth length

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

dose numeric Dose in grams / day

write_omv 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)
write_omv

Usage

write_omv(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: "")

Value

a list containing the meta data (mtaDta, written to metadata.json in the OMV-file), the extended data (xtdDta, written to xdata.json in the OMV-file) and the original data frame (dtaFrm)

Examples

## Not run:
library(jmvReadWrite);

# use the data set "ToothGrowth" and, if it exists, write it as jamovi-file using write_omv()
data("ToothGrowth");
wrtDta = write_omv(ToothGrowth, "Trial.omv");
print(names(wrtDta));
# the print-function is only used to force devtools::run_examples() to show output
# → "mtaDta" "xtdDta" "dtaFrm"
# returns a list with the metadata (mtaDta, e.g., column and data type),
# the extended data (xtdDta, e.g., variable lables), and the data frame (dtaFrm)
# the purpose of these variables is merely for checking (understanding the file format)
# and debugging

# check whether the file was written to the disk, get the file information (size, etc.)
# and delete the file afterwards
print(list.files(".", "Trial.omv");
# → "Trial.omv"
print(file.info("Trial.omv")$size);
# → 2111 (size may differ on different OSes)
unlink("Trial.omv");

## End(Not run)
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