

# Package ‘eatPrep’

December 17, 2013

**Type** Package

**Title** eatPrep

**Version** 0.1.5

**Depends** R (>= 2.14.0), eatTools, xlsx, car, foreign, reshape

**Date** 2013-12-16

**Author** eat authors <eat-commits@lists.r-forge.r-project.org>

**Maintainer** eat authors <eat-commits@lists.r-forge.r-project.org>

**Description** preparing data for IRT modeling

**License** GPL (>= 2)

**LazyLoad** yes

**LazyData** yes

**OS\_type** windows

## R topics documented:

aggregateData . . . . .	2
automateDataPreparation . . . . .	4
catPbc . . . . .	5
checkData . . . . .	7
checkDesign . . . . .	7
inputDat . . . . .	8
inputList . . . . .	9
mergeData . . . . .	11
readDaemonXlsx . . . . .	12
readSpss . . . . .	12
recodeData . . . . .	13
recodeMbiToMnr . . . . .	14
scoreData . . . . .	16
writeSpss . . . . .	17
<b>Index</b>	<b>19</b>

aggregateData

*Aggregate Datasets with Several Kinds of Missing Values***Description**

Aggregate datasets with constraints on missing values

**Usage**

```
aggregateData(dat, subunits, units, aggregatemissings = NULL,
              rename = FALSE, recodedData = TRUE, verbose = FALSE)
```

**Arguments**

dat	A data frame containing the data to be aggregated.
subunits	A data frame with subunit information. See 'Details'.
units	A data frame with unit information. See 'Details'.
aggregatemissings	Optional: A symmetrical $n \times n$ matrix with information on how missing values should be aggregated. If no matrix is given, the default will be used. See 'Examples'.
rename	Logical indicating whether units with only one subunit should be renamed to their unit name? Default is FALSE.
recodedData	Logical indicating whether colnames in dat are the subunit names (as in subunits\$subunit) or recoded subunit names (as in subunits\$subunitRecoded). Default is TRUE, meaning that colnames are recoded subitem names.
verbose	Logical. If TRUE additional information is printed.

**Details**

aggregateData aggregates units in data frames with special consideration of missing values. The aggregation of missing values is specified in the argument aggregatemissings. The rownames and colnames of this  $n \times n$  matrix correspond to the missing codes in the data. Additionally, the values "vc" (for valid code) and "err" (for error) are used. If aggregatemissings is a data frame, it will be coerced to a matrix with the first column of the data frame being transformed into the rownames of the matrix. A warning will be given if the matrix is not symmetrical.

aggregateData combines the subunits one by one, i.e. it aggregates the first two subunits of a unit, then adds the third subunit to the new aggregated variable and continues in this manner until all subunits are aggregated. In every step during the process a value of the first variable (e.g., the aggregated variable from the previous step) is matched with the rownames of aggregatemissings and the corresponding value of the second variable (e.g., the next subitem to be aggregated) is matched with the colnames of aggregatemissings. The new value of the aggregated variable will therefore be the value in aggregatemissings[firstVar, secondVar]. If the aggregation produces "err" at any point, it will stop. If the value in the final aggregated variable is "vc", either the mean or the sum of subunits will be calculated (the rule given in units\$unitAggregateRule determines which one will be chosen).

Examples of data frames subunits and units can be found via data([inputList](#)).

**Value**

A data frame with aggregated units and, if `rename = TRUE`, renamed subunits.

**Warning**

Missings are only correctly aggregated if their values correspond to the values given in `aggregatemissings`. `aggregateData` does not check for value types or whether codes are valid. Use of `checkData` and `recodeData` before using `aggregateData` is therefore strongly recommended.

**Author(s)**

Nicole Haag, Anna Lenski

**References**

For missing types see <http://code.google.com/p/zkdlb/wiki/MissingHandling>

**See Also**

[recodeData](#), [checkData](#)

**Examples**

```
data(inputDat)
data(inputList)

dat1 <- inputDat[[1]] # get first dataset from inputDat

# recode data
datRec <- recodeData(dat1, inputList$values, inputList$subunits)

# define matrix for missing aggregation (note: this is the default matrix)
am <- matrix(c("vc", "mvi", "vc", "mci", "err", "vc", "vc", "err",
"mvi", "mvi", "err", "mci", "err", "err", "err", "err",
"vc", "err", "mnr", "mci", "err", "mir", "mnr", "err",
"mci", "mci", "mci", "mci", "err", "mci", "mci", "err",
"err", "err", "err", "err", "mbd", "err", "err", "err",
"vc", "err", "mir", "mci", "err", "mir", "mir", "err",
"vc", "err", "mnr", "mci", "err", "mir", "mbi", "err",
"err", "err", "err", "err", "err", "err", "err", "err" ),
nrow = 8, ncol = 8, byrow = TRUE)

dimnames(am) <- list(c("vc", "mvi", "mnr", "mci", "mbd", "mir", "mbi", "err"),
c("vc", "mvi", "mnr", "mci", "mbd", "mir", "mbi", "err"))

print(am)

datAggr <- aggregateData(datRec, inputList$subunits, inputList$units,
aggregatemissings = am, rename = TRUE, recodedData = TRUE,
verbose = TRUE)
```

---

 automateDataPreparation

*automateDataPreparation*


---

## Description

prepare datasets for automateModels

## Usage

```
automateDataPreparation(datList = NULL, inputList, path = NULL,
  readSpss, checkData, mergeData, recodeData, recodeMnr = FALSE,
  aggregateData, scoreData, writeSpss,
  mnrfFunction = c( "recodeMbiToMnr" , "mnrfCoding" ),
  filedat = "mydata.txt", filesps = "readmydata.sps", breaks=NULL, nMbi = 2,
  rotation.id = NULL, aggregatemissings = NULL, rename = TRUE, recodedData = TRUE,
  correctDigits=FALSE, truncateSpaceChar = TRUE, newID = NULL, oldIDs = NULL,
  missing.rule = list(mvi = 0, mnrf = 0, mci = 0, mbd = NA, mir = 0, mbi = 0),
  verbose = FALSE)
```

## Arguments

datList	a list of data frames (see data( <a href="#">inputDat</a> )). If NULL SPSS .sav files have to be read in and readSPSS has to be TRUE.
inputList	a list of data frames containing additional information (see data( <a href="#">inputList</a> )).
path	a character string containing the path required by <a href="#">readSpss</a> (source of SPSS files) and <a href="#">writeSpss</a> . Default is the current R working directory.
readSpss	logical. If TRUE function <a href="#">readSpss</a> will be called.
checkData	logical. If TRUE function <a href="#">checkData</a> will be called.
mergeData	logical. If TRUE function <a href="#">mergeData</a> will be called.
recodeData	logical. If TRUE function <a href="#">recodeData</a> will be called.
recodeMnr	logical. If TRUE function <a href="#">recodeMbiToMnr</a> will be called.
aggregateData	logical. If TRUE function <a href="#">aggregateData</a> will be called.
scoreData	logical. If TRUE function <a href="#">scoreData</a> will be called.
writeSpss	logical. If TRUE function <a href="#">writeSpss</a> will be called.
mnrfFunction	character. Choose one of two functions for mnrf coding, either "recodeMbiToMnr" (default) or "mnrfCoding".
filedat	a character string containing the name of the output data file required by <a href="#">writeSpss</a> .
filesps	a character string containing the name of the output syntax file required by <a href="#">writeSpss</a> .
breaks	numeric vector (argument used by <a href="#">recodeMbiToMnr</a> ).
nMbi	numeric (argument used by <a href="#">recodeMbiToMnr</a> ).
rotation.id	character (argument used by <a href="#">recodeMbiToMnr</a> ).
missing.rule	a list containing recode information for character missings required by <a href="#">writeSpss</a> . See 'References' for description of default values.

**aggregatemissings** a symmetrical  $n \times n$  matrix or a data frame from `inputList$aggrMiss` with information on how missing values should be aggregated. If no matrix is given, the default will be used. See 'Details' in [aggregateData](#).

**rename** logical. See [aggregateData](#).

**recodedData** logical. See [aggregateData](#).

**correctDigits** logical. See [readSpss](#).

**truncateSpaceChar** logical. See [readSpss](#).

**newID** a character string containing the case IDs name in the final data frame. Default is "ID" or a character string specified in `inputList$newID`.

**oldIDs** a vector of character strings containing the IDs names in the original datasets. Default is as specified in `inputList$savFiles`.

**verbose** logical. If TRUE progress and additional information is printed.

### Value

A data frame.

### Author(s)

Karoline Sachse

### References

<http://code.google.com/p/zkdlib/wiki/MissingHandling>

### Examples

```
data(inputList)
data(inputDat)
preparedData <- automateDataPreparation(inputList = inputList,
  datList = inputDat, path = "c:/temp/test_eat",
  readSpss = FALSE, checkData = TRUE, mergeData = TRUE,
  recodeData = TRUE, recodeMnr = TRUE, breaks = c(1,2),
  aggregateData = TRUE, scoreData = TRUE,
  writeSpss = FALSE, verbose = TRUE)
```

---

catPbc

*Calculate Item Discrimination for Each Category of Categorical Variables*

---

### Description

catPbc calculates discrimination statistics for the categories of categorical variables, i.e. the correlations of each category with the total score on the test. This information can be useful in determining which categories of an item are influencing the overall fit and discrimination in item response scaling applications and/or to find mistakes in recoding.

**Usage**

```
catPbc(datRaw, datRec, idRaw, idRec, context.vars, values, subunits, xlsx = NULL)
```

**Arguments**

<code>datRaw</code>	A merged unrecoded dataset
<code>datRec</code>	The same dataset as in <code>datRaw</code> , in recoded form
<code>idRaw</code>	Name or column number of the identifier (ID) variable in unrecoded dataset
<code>idRec</code>	Name or column number of the identifier (ID) variable in recoded dataset
<code>context.vars</code>	Names or column numbers of one or more context variables (e.g., sex, school). <code>catPbc</code> will ignore these variables.
<code>values</code>	Data frame with information about values, see <a href="#">inputList</a> for details.
<code>subunits</code>	Data frame with information about subunits, see <a href="#">inputList</a> for details.
<code>xlsx</code>	Optional: Full path of Excel file for results.

**Details**

The column names of `datRaw` and `datRec` must be consistent with the names provided by the columns `subunit` and `subunitRecoded` in data.frame `subunits`. Otherwise, `catPbc` will fail.

**Value**

A data frame with the discrimination values for each category of categorical variables. The data frame contains the following columns:

<code>item</code>	Name of unrecoded item
<code>cat</code>	Name of category
<code>n</code>	Number of responses for this item
<code>freq</code>	Absolute frequency of the category
<code>freq.rel</code>	Relative frequency of the category
<code>catPbc</code>	Discrimination value for the category (correlation with total score)
<code>recodevalue</code>	Recode value for the category
<code>subunitType</code>	Type of subunit, see <a href="#">inputList</a> for details

**Author(s)**

Nicole Haag

**Examples**

```
data(inputDat)
data(inputList)

datRaw <- mergeData(newID = "ID", datList = inputDat, addMbd = TRUE)
datRec <- recodeData(datRaw, values = inputList$values, subunits=inputList$subunits)
pbcs <- catPbc(datRaw, datRec, idRaw = "ID", idRec = "ID", context.vars = "hisei",
               values = inputList$values, subunits = inputList$subunits)
```

---

`checkData`*Check Datasets for Missing Values and Invalid Codes*

---

**Description**

Check data frames for missing or duplicated entries in the ID variable, persons and/or variables without valid codes, and invalid codes. Invalid codes are codes which are not specified in table values.

**Usage**

```
checkData (dat, values, subunits, units, verbose = TRUE)
```

**Arguments**

<code>dat</code>	A data frame to be checked.
<code>values</code>	A data frame with code information. See 'Details'.
<code>subunits</code>	A data frame with subunit information. See 'Details'.
<code>units</code>	A data frame with unit information. See 'Details'.
<code>verbose</code>	Logical. If FALSE no information is printed.

**Details**

The results of `checkData` will be written to the console.

Examples of data frames `values`, `subunits` and `units` can be found via `data(inputList)`.

**Author(s)**

Nicole Haag, Anna Lenski

**References**

For missing types see <http://code.google.com/p/zkdlb/wiki/MissingHandling>

---

`checkDesign`*Check Datasets for test design deviations*

---

**Description**

Check data frames according to test design for valid codes instead of expected `sysMis` and for `sysMis` instead of valid codes.

**Usage**

```
checkDesign ( dat, booklets, blocks, rotation, sysMis="NA", id="ID",  
              subunits = NULL, verbose = TRUE )
```

**Arguments**

<code>dat</code>	A data frame
<code>booklets</code>	A data frame with booklet information. See 'Examples'.
<code>blocks</code>	A data frame with block information. See 'Examples'.
<code>rotation</code>	A data frame with rotation information. See 'Examples'.
<code>sysMis</code>	sysMis identifier as character. Default is "NA".
<code>id</code>	Case-id identifier as character. Default is "ID".
<code>subunits</code>	Optional: A data frame with subunit information (c.f. <a href="#">inputList</a> ). See 'Details'. Used to find names of recoded subunits.
<code>verbose</code>	logical. If FALSE no information is printed.

**Author(s)**

Karoline Sachse

**Examples**

```
data(inputDat)
data(inputList)

prepDat <- automateDataPreparation (inputList = inputList, datList = inputDat,
  readSpss = FALSE, checkData = FALSE, mergeData = TRUE, recodeData = TRUE,
  aggregateData = FALSE, scoreData = FALSE, writeSpss = FALSE, verbose = TRUE)

checkDesign(dat = prepDat, booklets = inputList$booklets, blocks = inputList$blocks,
  rotation = inputList$rotation, sysMis = "mbd", id="ID",
  subunits = inputList$subunits, verbose = TRUE)

prepDat[1:7,"I22R"] <- "1"
prepDat[1,c("I01R","I02R","I03R")] <- "mbd"

checkDesign(dat = prepDat, booklets = inputList$booklets, blocks = inputList$blocks,
  rotation = inputList$rotation, sysMis = "mbd", id="ID",
  subunits = inputList$subunits, verbose = TRUE)
```

---

inputDat

---

*List of Three Datasets from Educational Assessment*


---

**Description**

Simulated data for three booklets for an educational assessment study.

**Usage**

```
data(inputDat)
```



**Format**

This list contains 3 data frames, each with the following columns:

**ID** Person-ID

**Hisei** A continuous covariate.

**Ixx** Item responses to a selection of 30 test items.

**Details**

code, subunit and unit descriptions are stored in dataset `inputList`.

**Examples**

```
data(inputDat)
str(inputDat)
```

---

inputList

*Data Frames with Code, Subunit and Unit Information for Datasets in `inputDat`*

---

**Description**

These data frames contain information about codes, subunits and units for the datasets in `inputDat` and are necessary inputs for e.g. `automateDataPreparation`, `checkData`, `recodeData`, `aggregateData` and `scoreData`.

**Usage**

```
data(inputList)
```

**Format**

A list with three data frames:

1. units: Unit information, contains the following columns:

**unit** Unit name.

**unitType** Subunit types: ID = ID variable; TI = test item; CV = context variable.

**unitLabel** Unit label, to be used by `writeSpss`.

**unitDescription** Unit description.

**unitAggregateRule** Aggregate rule for unit: SUM; MEAN.

**unitScoreRule** Scoring rule for unit (not sure how this will be used in the future.)

2. subunits: Subunit information, contains the following columns:

**unit** Unit name, for which subunits are given.

**subunit** Subunit name.

**subunitType** Subunit types:?

**subunitLabel** Subunit label, to be used by `writeSpss`.

**subunitDescription** Subunit descriptions.

**subunitPosition** Subunit position in test booklet (e.g., line 1).

**subunitTransniveau** Subunit transformation level.

**subunitRecoded** Name of recoded subunit.

**subunitLabelRecoded** Label for recoded subunit, to be used when [writeSpss](#) is applied to a dataset produced by [recodeData](#).

3. values: Value information, contains the following columns:

**subunit** Subunit name, for which values are given.

**value** Valid values for the respective subunit.

**valueRecode** Recode values for the respective value.

**valueType** Value types: vc = valid code; mbd = missing – by design; mvi = missing – volume insufficient; mnr = missing – not reached; mci = missing – coding impossible; mbi = missing – by intention.

**valueLabel** Value labels, to be used by [writeSpss](#).

**valueDescription** Value descriptions.

**valueLabelRecoded** Labels for recoded values, to be used when [writeSpss](#) is applied to a dataset produced by [recodeData](#).

**valueDescriptionRecoded** Descriptions for recoded values.

4. unitRecodings: Unit recoding information, contains the following columns:

**unit** Unit name

**value** Valid values for the respective unit.

**valueRecode** Recode values for the respective value.

**valueType** Value types: vc = valid code; mbd = missing – by design; mvi = missing – volume insufficient; mnr = missing – not reached; mci = missing – coding impossible; mbi = missing – by intention.

**valueLabel** Value labels, to be used by [writeSpss](#).

**valueDescription** Value descriptions.

**valueLabelRecoded** Labels for recoded values, to be used when [writeSpss](#) is applied to a dataset produced by [recodeData](#).

5. savFiles: information for [readSpss](#), contains the following columns:

**filename** SPSS filenames

**case.id** ID variable in the respective dataset, used by [mergeData](#)

6. newID: information for [mergeData](#), contains the following columns:

**key** one of the entries should be master-id

**value** the corresponding value; how the ID variable in the final dataset shall be named

7. aggrMiss: missing aggregation pattern for [aggregateData](#)

8. blocks: missing aggregation pattern for [aggregateData](#)

**subunit** Subunit name.

**block** Block name.

**subunitBlockPosition** The subunit's position in the corresponding block.

9. booklets: Design

**booklet** Booklet name.

**block1 ... blockX** Block names in booklet.

10. rotation: Assignment of IDs to booklets

**ID** Case identifier.

**booklet** Booklet name.

**Examples**

```
data(inputList)
str(inputList)
```

---

mergeData	<i>Merge Data Frames and fill NA gaps</i>
-----------	---

---

**Description**

Merges data frames using one key variable. Fills NA gaps.

**Usage**

```
mergeData(newID = "ID", datList, oldIDs=NULL, addMbd = FALSE, verbose=FALSE)
```

**Arguments**

newID	character string containing the ID variable's name in the future merged dataset
datList	list of data frames to be merged
oldIDs	character vector OR numeric vector containing either names of the key variables in datList or their column number in each dataframe in datList Default is a vector containing replicates of the value of newID.
addMbd	logical. If TRUE NA is replaced by "mbd" (missing by desgin).
verbose	logical. If TRUE progress is printed.

**Value**

a data frame containing unique cases and unique variables. All cases and all variables that could be identified in the original data frames will be kept and matched.

**Author(s)**

Karoline Sachse, Nicole Haag

**Examples**

```
data(inputDat)
str(inputDat)

mergedDataset <- mergeData("idstud", inputDat, c("ID", "ID", "ID"), addMbd=TRUE)
str(mergedDataset)

mergedDataset <- mergeData("ID", inputDat, verbose=TRUE)
str(mergedDataset)
```

---

readDaemonXlsx	<i>read xlsx-Files produced by ZKDaemon</i>
----------------	---

---

### Description

read xlsx-Files produced by ZKDaemon

### Usage

```
readDaemonXlsx(filename)
```

### Arguments

filename	A character string containing path, name and extension of .xlsx produced by ZKDaemon. Caution! Sheet names are important (see Details).
----------	---

### Details

Reads in the following .xlsx sheets: "units", "subunits", "values", "unitrecoding", "sav-files", "params", "aggregate-missings", "itemproperties", "propertylabels", "booklets", "blocks"

### Value

A list of data frames containing information that is required by [automateDataPreparation](#)

### Author(s)

Karoline Sachse

### Examples

```
str(inputList)
```

---

readSpss	<i>Read SPSS Data Files and Truncate Space in String Variables and Change Column Width</i>
----------	--

---

### Description

Read SPSS Data Files and Truncate Space in String Variables and Change Column Width

### Usage

```
readSpss(file, correctDigits = FALSE, truncateSpaceChar = TRUE, oldID = NULL, newID = NULL)
```

**Arguments**

file	Name of the SPSS data file to be read in
correctDigits	Logical: whether values should be transformed to have uniform width in each column, see 'Details'.
truncateSpaceChar	Logical: whether string variables should be trimmed to remove leading and trailing spaces.
oldID	Optional: A character string containing the ID name in the original SPSS dataset.
newID	Optional: A character string containing the ID name after reading in the data.

**Details**

If correctDigits=TRUE, the values in each column are transformed to have uniform width by adding leading zeros. The width of a column is determined by the longest value in this column, e.g., if a column contains the values 1, 10, 100 the transformed column will be 001, 010, 100. This can be useful if the values had leading zeros which were removed by reading in the SPSS file.

If oldID and newID are used, the ID variable in the SPSS dataset will be changed to newID when the file is read.

**Value**

A data frame with trimmed character variables and corrected values (if specified). All columns are of mode character.

**Author(s)**

Nicole Haag, Sebastian Weirich

---

 recodeData

---

*Recode Datasets with Missing Values*


---

**Description**

Recode datasets with special consideration of missing values.

**Usage**

```
recodeData(dat, values, subunits, verbose = FALSE)
```

**Arguments**

dat	A data frame
values	A data frame with code information. See 'Details'.
subunits	A data frame with subunit information. See 'Details'.
verbose	Logical. If TRUE additional information is printed.

**Details**

recodeData recodes data frames with special consideration of missing values. The results of recodeData will be written to a protocol file with sunk. recodeData will give warnings, if missing or incomplete recode informations are found. Values without recode information will NOT be recoded!

Examples of data frames values and subunits can be found via `data(inputList)`.

**Value**

A data frame with recoded variables according to the specifications in values and subunits. Column names will be the names specified in `subunits$subunitRecoded`.

**Author(s)**

Martin Hecht, Christiane Penk, Nicole Haag

**References**

<http://code.google.com/p/zkdlb/wiki/MissingHandling>

**See Also**

[aggregateData](#), [checkData](#)

**Examples**

```
data(inputDat)
data(inputList)

dat1 <- inputDat[[1]] # get first dataset from inputDat
datRec <- recodeData(dat1, inputList$values, inputList$subunits, verbose = TRUE)
str(datRec)
```

---

recodeMbiToMnr

*Recode Missing by Intention to Missing not Reached*

---

**Description**

recodeMbiToMnr converts missing responses coded as missing by intention at the end of a block of items to missing not reached.

**Usage**

```
recodeMbiToMnr (dat, id, rotation.id, booklets, blocks, rotation, breaks, nMbi = 2,
subunits = NULL, verbose = FALSE)
```

**Arguments**

<code>dat</code>	A dataset. Missing by intention needs to be coded mbi.
<code>id</code>	Name or column number of identifier (ID) variable in dataset.
<code>rotation.id</code>	Name of rotation indicator (e.g. "booklet") in dat.
<code>booklets</code>	A data frame containing the sequence of blocks in each booklet in wide format. The column names need to be booklet, block1, block2, block3 ....
<code>blocks</code>	A data frame containing the sequence of subunits in each block in long format. The column names need to be subunit, block, subunitBlockPosition.
<code>rotation</code>	A data frame containing the assignment of booklets to participants. The first column should have the same name as the ID variable in dat and the second column needs to be namedbooklet.
<code>breaks</code>	Number of blocks after which mbi shall be recoded to mnr, e.g., c(1, 2) to specify breaks after the first and second block.
<code>nMbi</code>	Number of mbi-Codes required at the end of a block to code mnr. Needs to be $\geq 1$ .
<code>subunits</code>	Optional: A data frame with subunit information if a dataset is used that has been recoded with recodeData. This data frame will be used to find the names of recoded subunits in dat.
<code>verbose</code>	logical. If TRUE additional diagnostics are printed.

**Details**

In order to code mnr, a certain number of subunits at the end of a block need to be coded mbi. This number can be specified with the argument `nMbi`. The default is 2, i.e. if the last and second to last subitem in a block are coded mbi, both subunits, as well as the preceding subunits coded mbi, will be recoded to mnr. If `nMbi` is larger than the number of subunits in a given block, no subitem in this block will be recoded. If all subunits in a block are coded mbi, none of them will be recoded to mnr.

If a `subunits` data frame is specified, `recodeMbiToMnr` expects to find the recoded subunits in dat.

Examples for data frames `booklets`, `blocks`, `rotation` and `subunits` can be found via `data(inputList)`

**Value**

A data frame with missing not reached coded as mnr. For each person with at least one mnr in the returned dataset the names of recoded variables are given as an attribute to dat.

**Author(s)**

Nicole Haag

**Examples**

```
data(inputDat)
data(inputList)

prepDat <- automateDataPreparation (inputList = inputList, datList = inputDat,
  readSpss = FALSE, checkData=FALSE, mergeData = TRUE, recodeData=TRUE,
  aggregateData=FALSE, scoreData= FALSE, writeSpss=FALSE, verbose = TRUE)

mnrDat <- recodeMbiToMnr (dat = prepDat, id = "ID", booklets = inputList$booklets,
  blocks = inputList$blocks, rotation = inputList$rotation, breaks = c(1, 2),
```

```
nMbi = 2, subunits = inputList$subunits, verbose = TRUE)
```

---

scoreData

*Score Datasets with Missing Values*


---

## Description

Score datasets with special consideration of missing values.

## Usage

```
scoreData(dat, unitrecodings, units, verbose = FALSE)
```

## Arguments

dat	A data frame
unitrecodings	A data frame with information about the scoring of units. See 'Details'.
units	A data frame with unit information. See 'Details'.
verbose	logical. If TRUE additional information is printed.

## Details

This function is very similar to `recodeData`, but with a few defaults that are more sensible for scoring. `scoreData` will give warnings when incomplete scoring informations are found. Values without scoring information will not be scored!

Examples of data frames `unitrecodings` and `units` can be found via `data(inputList)`.

## Value

A data frame with scored variables according to the specifications in `unitrecodings` and `units`.

## Author(s)

Nicole Haag

## References

<http://code.google.com/p/zkdlb/wiki/MissingHandling>

## See Also

[recodeData](#), [automateDataPreparation](#), [inputList](#)



## Examples

```
data(inputDat)
data(inputList)

prepDat <- automateDataPreparation (inputList = inputList, datList = inputDat,
  readSpss = FALSE, checkData=FALSE, mergeData = TRUE, recodeData=TRUE,
  aggregateData=TRUE, scoreData= FALSE, writeSpss=FALSE, verbose = TRUE)

datSco <- scoreData(prepDat, inputList$unitRecodings, inputList$units, verbose = TRUE)
str(datSco)
```

---

writeSpss

*Export Datasets to SPSS*


---

## Description

Writes data and SPSS syntax files.

## Usage

```
writeSpss(dat, values, subunits, units,
  filedat = "mydata.txt", filesps = "readmydata.sps",
  missing.rule = list(mvi = 0, mnr = 0, mci = NA, mbd = NA, mir = 0, mbi = 0),
  path = getwd(), sep = "\t", dec = ",", verbose = FALSE)
```

## Arguments

dat	A data frame which should be exported to SPSS.
values	A data frame with code information. See 'Details'.
subunits	A data frame with subunit information. See 'Details'.
units	A data frame with unit information. See 'Details'.
filedat	A character string with the name of the output data file.
filesps	A character string with the name of the output syntax file.
missing.rule	A list containing recode information for character missings. See 'References' for description of default values.
path	A character string containing the path of the output file. The value in path is appended to filedat and filesps. By default, files are written to the current R working directory. If path=NULL then no file path appending is done.
sep	The separator between the data fields.
dec	The decimal separator for numerical data.
verbose	Logical. If TRUE file names and additional information are printed.

**Details**

This function automates most of the work needed to export a dataset to SPSS. It uses a modified version of `writeForeignSPSS()` from the `foreign` package and of `mids2spss()` from the `mice` package. The modified version allows for a choice of the field and decimal separators, makes some improvements to the formatting and provides variable labels and value labels according to the information in the data frames values, subunits and units.

Examples of data frames values, subunits and units can be found on `data(inputList)`.

The SPSS syntax file has the proper file names and separators set, so in principle it should run and read the data without alteration. SPSS is more strict than R with respect to the paths. Always use the full path, otherwise SPSS may not be able to find the data file.

**Value**

Used for its side effects. The return value is NULL.

**Author(s)**

Nicole Haag

**References**

<http://code.google.com/p/zkdlb/wiki/MissingHandling>

**See Also**

`inputList`

# Index

## \*Topic **datasets**

inputDat, [8](#)

inputList, [9](#)

aggregateData, [2](#), [4](#), [5](#), [9](#), [10](#), [14](#)

automateDataPreparation, [4](#), [9](#), [12](#), [16](#)

catPbc, [5](#)

checkData, [3](#), [4](#), [7](#), [9](#), [14](#)

checkDesign, [7](#)

inputDat, [4](#), [8](#), [9](#)

inputList, [2](#), [4](#), [6](#), [8](#), [9](#), [9](#), [14–16](#), [18](#)

mergeData, [4](#), [10](#), [11](#)

readDaemonXlsx, [12](#)

readSpss, [4](#), [5](#), [10](#), [12](#)

recodeData, [3](#), [4](#), [9](#), [10](#), [13](#), [16](#)

recodeMbiToMnr, [4](#), [14](#)

scoreData, [4](#), [9](#), [16](#)

writeSpss, [4](#), [9](#), [10](#), [17](#)