

# Package ‘hsstools’

May 2, 2022

**Title** Simplify the HSS Data Process

**Version** 0.0.0.9000

**Description** A collection of functions to simplify and streamline the process of cleaning and analysing HSS data.

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hssformat

*Apply HSS formatting to contingency table*


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**Description**

Apply HSS formatting to contingency table

**Usage**

```
hssformat(x)
```

**Arguments**

x                      A flextable object.

**Value**

a formatted flextable.

**Examples**

```
WIP
```

---

hssformat\_multi

*Apply HSS formatting to multi-response contingency table*


---

**Description**

Apply HSS formatting to multi-response contingency table

**Usage**

```
hssformat_multi(x)
```

**Arguments**

x                      A flextable object.

**Value**

A flextable object.

**Examples**

```
WIP
```

---

|          |  |
|----------|--|
| hsslabel | <i>Apply English or Arabic labels to a flextable object.</i> |
|----------|--|

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### Description

Apply English or Arabic text labels to a flextable object. `hsslabel()` calls upon `hsslabel_var()` and `hsslabel_val()` which return a character string of length 1 containing the variable label, and a character string of length n containing the value labels respectively.

### Usage

```
hsslabel(table, lang = "english", lookup = TRUE)
```

```
hsslabel_var(variable, lang = "english", lookup = TRUE)
```

```
hsslabel_val(variable, lang = "english", lookup = TRUE)
```

### Arguments

|            |  |
|------------|--|
| table      | A flextable object.  |
| lang       | The language to return. Accepts "en" or "ar".                        |
| lookup     | Set to TRUE to use a lookup table for renamed variables.             |
| variable   | The variable name  |
| dict_var   | The dictionary object containing the variable names and labels.      |
| dict_val   | The dictionary object containing the value names and labels.         |
| lookuplist | If lookup is set to TRUE, provide object containing the lookup list. |

### Value

A flextable object with question and response labels.

### See Also

[hssdict\(\)](#) to create a variable or value label dictionary, [hssnewnames\(\)](#) for creating a lookuplist of renamed variables.

### Examples

WIP

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|           |  |
|-----------|--|
| hss_chisq | <i>Runs chi-squared test on selected variables</i> |
|-----------|--|

---

**Description**

Runs chi-squared test on selected variables

**Usage**

```
hss_chisq(df, vars, group, full = FALSE)
```

**Arguments**

|       |  |
|-------|--|
| df    | The dataframe containing the variable(s) of interest                           |
| vars  | The variable(s) of interest. Accepts a single value or character string.       |
| group | The grouping (or disaggregation) variable.                                     |
| full  | should the full results be returned. If set to FALSE, only p.value is returned |

**Value**

A vector containing the results of the chi-squared test for the selected variables.

---

|                 |  |
|-----------------|--|
| hss_create_dict | <i>Create a dictionary of HSS variable or value labels</i> |
|-----------------|--|

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**Description**

Create a dictionary of HSS variable or value labels

**Usage**

```
hss_create_dict(form, type = "var")
```

**Arguments**

|      |  |
|------|--|
| form | Location of the XLS form   |
| type | Use "var" to create a dictionary of variable names and labels. Use "val" to create a dictionary of value names and labels. |

**Value**

A dataframe containing variable or value names and their associated text labels.

**Examples**

```
WIP
```

---

`hss_create_lookuplist` *Create a lookup list of old & new variable names from renaming in a Stata .do file*

---

**Description**

Create a lookup list of old & new variable names from renaming in a Stata .do file

**Usage**

```
hss_create_lookuplist(dofile)
```

**Arguments**

`dofile`                      Location of the Stata .do file with renaming commands

**Value**

A list with all old & new names of renamed variables

**See Also**

[namelookup\(\)](#) to lookup names in the generated list.

**Examples**

```
WIP
```

---

`hss_create_question_list`  
*Create a list of questions from XLS form*

---

**Description**

Create a list of questions from XLS form

**Usage**

```
hss_create_question_list(dict_path)
```

**Arguments**

`dict_path`                      Path to the XLS form

**Value**

a named character vector with question type as name and the question/variable name as value.

---

|               |  |
|---------------|--|
| hss_dummydata | <i>Generates a dataframe for testing purposes.</i> |
|---------------|--|

---

### Description

Generates a dataframe for testing purposes.

### Usage

```
hss_dummydata(rows = 500, seed = 1234)
```

### Arguments

|      |   |
|------|---|
| rows | An integer to set the number of rows to generate. Default is 500. |
| seed | Set the seed for random number generation. Default is 1234.       |

### Value

A dataframe

### Examples

```
df <- testdata(100)
```

---

|                   |  |
|-------------------|--|
| hss_export_tables | <i>Exports a list of data tables to .csv</i> |
|-------------------|--|

---

### Description

Exports a list of data tables to .csv

### Usage

```
hss_export_tables(df_list, path)
```

### Arguments

|         |  |
|---------|--|
| df_list | A named list containing the data tables. The output of hss_write_tables() usually. |
| path    | Where to store the .csv output.  |

---

|               |   |
|---------------|---|
| hss_get_multi | <i>Find 'select multiple' response variables associated with a question variable.</i> |
|---------------|---|

---

**Description**

Find 'select multiple' response variables associated with a question variable.

**Usage**

```
hss_get_multi(var)
```

**Arguments**

|         |   |
|---------|---|
| var     | The variable for which 'select multiple' response variable are needed.  |
| reverse | If set to TRUE returns the new variable names. FALSE returns old names. |

**Value**

a character string with all associated 'select multiple' variable names.

---

|                |  |
|----------------|--|
| hss_lookup_var | <i>Helper functions to look up variable or value names and labels.</i> |
|----------------|--|

---

**Description**

These helper functions are used to look up info related to a specific variable. This can be the variable label, the associated value labels or the old/new variable name. These functions are mostly for use within other functions.

**Usage**

```
hss_lookup_var(var, input_col, return_col)
```

```
hss_lookup_val(var, input_col, return_col)
```

```
hss_lookup_list(var, reverse = FALSE)
```

**Arguments**

|            |   |
|------------|---|
| var        | The variable name. Only a single character value is accepted, except for hss_lookup_list, which accepts a character string. |
| input_col  | The column in which the variable name can be found  |
| return_col | The column for which the associated value should be returned  |
| reverse    | If set to TRUE will return the new name instead of the old name. Set to FALSE by default.                                   |

**Value**

A character string containing the found value(s)

---

|                     |  |
|---------------------|--|
| hss_mergetranslated | <i>Merges HSS dataframe with dataframe containing translated columns</i> |
|---------------------|--|

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**Description**

Merges HSS dataframe with dataframe containing translated columns

**Usage**

```
hss_mergetranslated(df, df_translated)
```

**Arguments**

|               |   |
|---------------|---|
| df            | The original HSS dataframe                                  |
| df_translated | The dataframe containing "_ar" and translated "_en" columns |

**Value**

A merged dataframe containing HSS data and all translated columns.

---

|                    |   |
|--------------------|---|
| hss_overview_multi | <i>Get overview table for 'select-multiple' questions</i> |
|--------------------|---|

---

**Description**

Get overview table for 'select-multiple' questions

**Usage**

```
hss_overview_multi(df, vars, percent = TRUE)
```

**Arguments**

|         |   |
|---------|---|
| df      | The dataframe containing the questions                            |
| vars    | Selected based on a string that identifies all relevant variables |
| percent | T/F   |



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|                     |   |
|---------------------|---|
| hss_overview_single | Create overview table for a group of similar 'select-one' questions |
|---------------------|---|

---

**Description**

Create overview table for a group of similar 'select-one' questions

**Usage**

```
hss_overview_single(df, vars, percent = TRUE)
```

**Arguments**

|         |   |
|---------|---|
| df      | The dataframe containing the questions                            |
| vars    | Selected based on a string that identifies all relevant variables |
| percent | T/F   |

**Value**

A dataframe with the selected questions.

---

|                    |                   |
|--------------------|-------------------|
| hss_surveyduration | Load raw HSS Data |
|--------------------|-------------------|

---

**Description**

Loads raw HSS datafile and performs some basic cleaning: proper encoding of Arabic, dates formatted as date-time objects, calculate survey duration.

**Usage**

```
hss_surveyduration(path, skip = 0)
```

**Arguments**

|      |   |
|------|---|
| path | Path to the HSS data file. Expects a .csv file  |
| skip | Number of rows to skip. Default is 0. Use this if you know how many rows contain test data. |

**Value**

A dataframe with an added SurveyDuration column

---

|                 |   |
|-----------------|---|
| hss_table_multi | <i>Generate contingency table for multiresponse questions</i> |
|-----------------|---|

---

**Description**

Generate contingency table for multiresponse questions

**Usage**

```
hss_table_multi(df, var, group, percent = TRUE)
```

**Arguments**

|         |  |
|---------|--|
| df      | The dataframe containing the multiresponse questions         |
| group   | A grouping (or disaggregation) variable.                     |
| percent | Set to TRUE to show percentages. Set to FALSE to show counts |
| resp    | A character string of all response variables to include      |

**Value**

A contingency table containing the multiresponse answers and a grouping variable

---

|                  |                                  |
|------------------|----------------------------------|
| hss_table_single | <i>HSS Data Table Generation</i> |
|------------------|----------------------------------|

---

**Description**

HSS Data Table Generation

**Usage**

```
hss_table_single(df, var, group, percent = TRUE)
```

**Arguments**

|         |  |
|---------|--|
| df      | A dataframe containing the variable of interest and grouping variable. |
| var     | A character string with the variable name of interest.                 |
| group   | A character string with the grouping (or disaggregation) variable.     |
| percent | Set to TRUE to show percentages. Set to FALSE to show counts.          |

**Value**

A contingency table with the variable of interest and grouping variable.

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|               |   |
|---------------|---|
| hss_translate | <i>Translate HSS content from Arabic to English</i> |
|---------------|---|

---

**Description**

Translate HSS content from Arabic to English

**Usage**

```
hss_translate(df, apikey)
```

**Arguments**

|    |  |
|----|--|
| df | the dataframe containing Arabic text columns. These columns are expected to end in "_ar" |
|----|--|

**Value**

A dataframe containing Arabic text columns and their English translations.

---

|                  |  |
|------------------|--|
| hss_write_tables | <i>Write tables to a list for selected variables</i> |
|------------------|--|

---

**Description**

Write tables to a list for selected variables

**Usage**

```
hss_write_tables(df, questions, group, percent = TRUE)
```

**Arguments**

|           |   |
|-----------|---|
| df        | The dataframe containing relevant variables                                     |
| questions | A named character vector containing variable names and the table type required. |
| group     | The desired grouping/disaggregation variable.                                   |

**Value**

A named list of dataframes.

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