Spotlight Session - Statistics with MAXQDA Stats

What is MAXQDA Stats?

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• A module in MAXQDA since version 12.3 – fully integrated in the program version *MAXQDA Analytics Pro*

What can you do with MAXQDA Stats?

- Statistical analysis of MAXQDA data (codes and document variables)
- Statistical analysis of external data sets
- Statistical analysis of data that you enter yourself
- Interactive result display
- Transform and recode data
- Output viewer for results; export results to Word and export data in XLSX-format and SAV-format

What is the idea behind MAXQDA Stats?

- Supporting mixed methods research, i.e. the combination of qualitative and quantitative research
- Supporting the combination of qualitative and quantitative methods of analysis
- Use Stats to analyze stand-alone quantitative data

Statistics available in Stats

The most used methods of descriptive and inferential statistics are integrated in Stats

- 1. Frequency tables
- 2. Descriptive statistics: mean, standard deviation, variance, median, quartiles, minimum, maximum, range, sum, standard error, 95% confidence interval for the mean



3. Crosstabs: absolute and relative frequencies, row and column percentages, expected frequencies, residuals, standardized residuals, adjusted standardized residuals; Chi-square, Phi, Cramer's V, contingency coefficient C

- 4. One-way analysis of variance: with output descriptive statistics and Levene test of homogeneity of variance
- 5. Correlation: Pearson's r and Spearman's rho
- 6. Scale analysis: Cronbach's alpha

Starting Stats

MAXQDA Stats is launched from the tab **Stats** in MAXQDA's main ribbon menu (only in the version Analytics Pro). Select one of five different options:



After starting Stats, the MAXQDA 4-windows-screen is hidden. You see the Stats interface and the Stats menu.

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	Document group	Document na ne	Number of coded segments	Number of memos	Marital Status	Q.1. Job Security Scale	Q.3. Fault	Age Group	Region
1	SURVEY	RESP002	6	0	widowed	4	BANKS	70-79	rural
2	SURVEY	RESP003 Main	Menu 11	0	married	2	BANKS	30-39	rural
3	SURVEY	RESP004	5	0	married	1	BANKS	40-49	rural
4	SURVEY	RESP006	5	0	married	3	BANKS	50-59	rural
5	SURVEY	RESP008	5	0		4	BANKS	30-39	rural
6	SURVEY	RESP009	8	0		0	BANKS	60-69	urban
7	SURVEY	RESP010	6	0	single	0	BANKS, EURO	60-69	urban
в	SURVEY	RESP011	5	0	widowed	0	BANKS, EURO	60-69	urban
9	SURVEY	RESP012	7	0	married	4	BANKS, EURO	60-69	urban
0	SURVEY	0500045	9	0	married	1	BANKS	50-59	rural
1	SURVEY	Change view	4	0		2	BANKS	40-49	rural
2	SURVEY	RI SP020	8	0	single	2	EURO, GOVERNMENT	20-29	a sea l
3	SURVEY	RESP022	4	0	widowed	3	BANKS	60-69 Nu	mber of case
4	SURVEY	RESP030	5	0	married	2	BANKS	40-49	urban
5	SURVEY	RI SP033	7	0	married	2	BANKS, EURO	30-39	rural

You may switch between three kinds of views: Data Editor, Variable View and Output Viewer.

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Statistical procedures: Frequencies

Choose "Descriptive Statistics > Frequencies" to analyze the frequency of variables. The result tables can be sorted according to your needs. You may delete rows and the table will be updated immediately. You also may save cases (documents) with particular values as data set for analyzing later the qualitative data of theses persons.

		F	requent	cies		
	Age Group	\$ ⇒	C		→ ‡	
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		Freque	ncy	Percent	Percent (valid)	Percent (cum.)
20-29			17	10,9	11,0	11,0
30-39	Copy	¥C ⊠	34	21,8	21,9	32,9
40-49	× Delete	<u>ک</u>	37	23,7	23,9	56,8
50-59	Save As Document Set		17	10,9	11,0	67,7
60-69	Select All	ЖА	49	31,4	31,6	99,4
70-79			1	0,6	0,6	100,0
TOTAL (valid)			155	99,4	100,0	
MISSING: Syst	tem		1	0,6		

You may also select multiple rows and merge them.

		Frequen	cies	IS			
	je Group		-1 -1 -1				
		Frequency	Percent	Percent (valid)	Percent (cum.)		
20-29		17	10,9	11,0	11,0		
30-39		34	21,8	21,9	32,9		
40-49		37	23,7	23,9	56,8		
50-59		17	10,9	11,0	67,7		
60-69		19	31,4	31,6	99,4		
70-79	l∎ Copy X Delete	¥C ⊠	0,6	0,6	100,0		
TOTAL (valid)			99,4	100,0			
MISSING: System	Merge Values Save As Document Set		0,6				
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	Select All	ЖA					

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Statistical procedures: Crosstabs

After the selection of variables for the row and the columns the result table is displayed. Significant cells of the table can be highlighted, which makes it much easier to find relevant combinations of variable values. The frequency of individual variable values corresponds to the number of documents in which these variable values occurred. In this case, a compilation of documents is available behind each frequency count. This compilation of documents can be saved as a document set in MAXQDA: Right-click on a cell and select "Save as document set".

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Region		20-29	30-39	40-49	50-59	60-69	70-79	Total
ural		52,9	47,1	64,9	82,4	28,6	100,0	50,3
urban		47,1	52,9	35,1	17,6	71,4	0,0	49,7
Fotal		100,0	100,0	100,0	100,0	100,0	100,0	100,0

In the cells of the table different values like row percentages or column percentages can be displayed. Also measures of association like Chi Square, Phi or Cramer's V can be computed. But the best is that you can transfer all the information to the table to MAXQDA and save the documents behind a cell as "Document Set".

Transfer Results to the Output Viewer

After the tables have been created and adapted according to your needs, they can be transferred to the Output Viewer from which they can later be exported together:

- Click the Insert into Output Viewer icon to transfer the currently displayed results table to the Output Viewer.
- Click the Insert all result tables into Output Viewer icon to transfer all created tables to the Output Viewer at once.



Closing Stats and returning to the MAXQDA project

After completing the analysis in MAXQDA Stats, modified variable values can be transferred back to the MAXQDA project to update the existing variables and add new ones. Likewise, document sets created during the analysis can be transferred.

In principle, the transfer of variables from MAXQDA Stats to the MAXQDA project occurs in exactly the same manner as when data is read in MAXQDA using the Import data (document variables) function.

To transfer MAXQDA Stats data to the MAXQDA project, close the MAXQDA Stats window using the X symbol (Windows) or red X symbol (Mac) at the top of the window or by selecting File > Quit MAXQDA Stats from the Stats main menu.