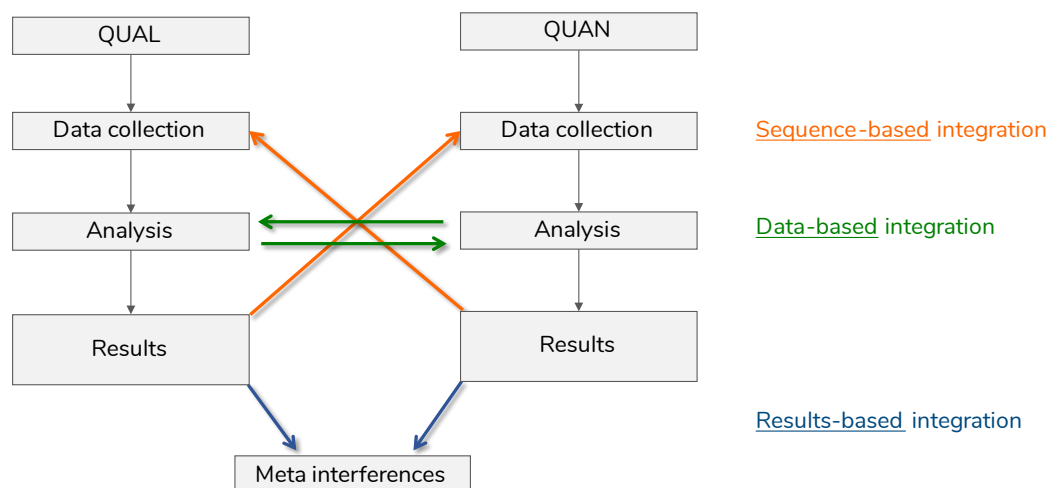


Spotlight Session: Mixed Methods with MAXQDA

In mixed methods studies, both qualitative and quantitative data are collected and analyzed. MAXQDA provides numerous functions for evaluating both types of data separately:

Analysis of qualitative data	Analysis of quantitative data
<ul style="list-style-type: none"> • Data import Texts, PDFs, tables, videos, webpages, social media, ... • Data exploration Search for words and word combinations, memos, comments, paraphrases, ... • Data analysis Coding, memoing, writing summaries, visual tools, ... • Reporting Visual tools, exports, ... 	<ul style="list-style-type: none"> • Frequency tables • Charts Bar charts, boxplots, histograms • Descriptive statistics • Crosstabs and correlation • Inference statistics Analysis of variance, Chi -square-test, correlation • Build a scale

Kuckartz and Rädiker (2019, 2021) distinguish three forms of integration in mixed methods studies:



- *Results-based integration* can be performed in any mixed methods project.
- *Data-based integration* requires that qualitative and quantitative data are available for at least some of the cases that can be matched on a case-by-case or group-by-group basis.
- *Sequence-based integration* occurs in sequential designs: the results of the qualitative or quantitative sub-study guide the subsequent sub-study, e.g., the selection of cases or the development of an interview guideline or standardized questionnaire.

MAXQDA provides functions for all of these integration variants but plays to its great strength in data-based integration, in which qualitative and quantitative data are analyzed together.

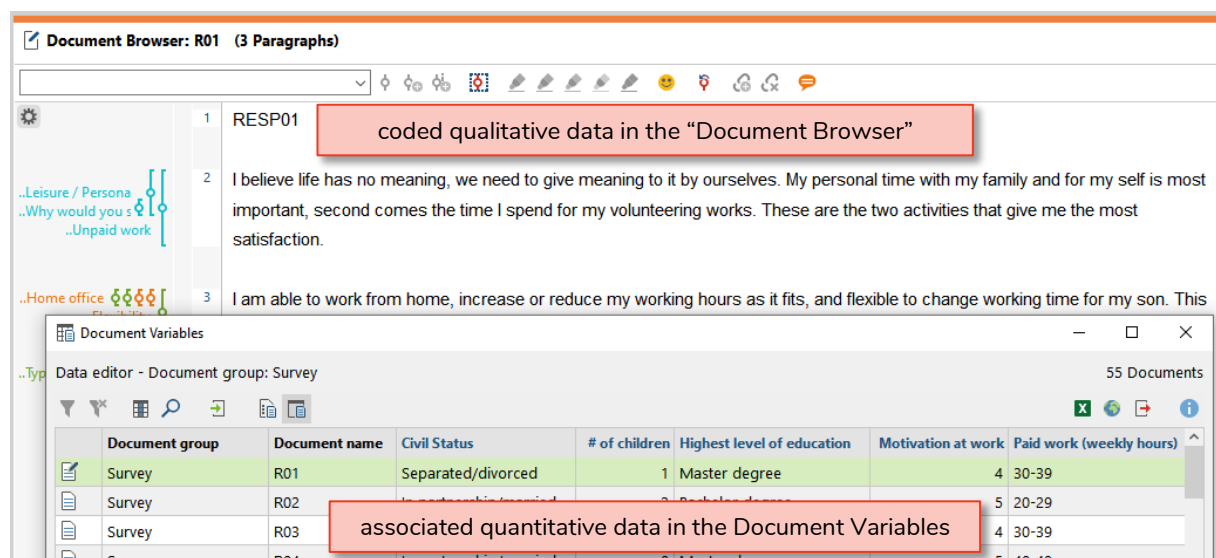
Most mixed methods functions can be found on the [Mixed Methods](#) menu tab:



Tip: All the mixed methods functions presented here can also be usefully applied in many (merely) qualitative projects, especially when standardized background information is available in the form of document variables in the MAXQDA project.

The Document Variables

MAXQDA's document variables provide a bridge between the qualitative and quantitative data: supplementary standardized data are available for the documents (i.e., mostly the cases) of a project, e.g., scale values are available for each person interviewed and, in the case of surveys, the answers to closed questions are available in addition to the answers to open questions:

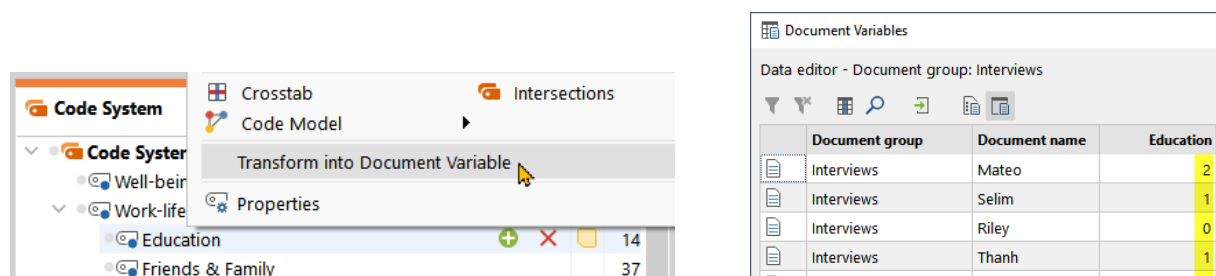


The screenshot shows the MAXQDA interface. The top window is the 'Document Browser: R01 (3 Paragraphs)'. It displays three paragraphs of text. A red box highlights the first paragraph with the text 'coded qualitative data in the "Document Browser"'. Below this is the 'Document Variables' window, which shows a table of data for 55 documents. A red box highlights a row in the table with the text 'associated quantitative data in the Document Variables'.

Document group	Document name	Civil Status	# of children	Highest level of education	Motivation at work	Paid work (weekly hours)
Survey	R01	Separated/divorced	1	Master degree	4	30-39
Survey	R02	In partnership/divorced	2	Post-graduate	5	20-29
Survey	R03	Single	0	Master degree	4	30-39
Survey	R04	In partnership/married	0	Master degree	5	40-49

Transform code to variable

Each code (qualitative) can be saved as a document variable (quantitative) that indicates how often the code was assigned in a document (right-click Code > Transform to Document Variable or Mixed Methods > Quantizing):



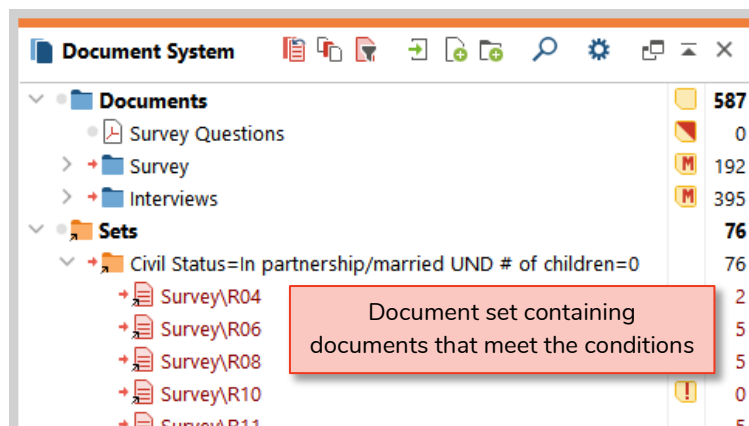
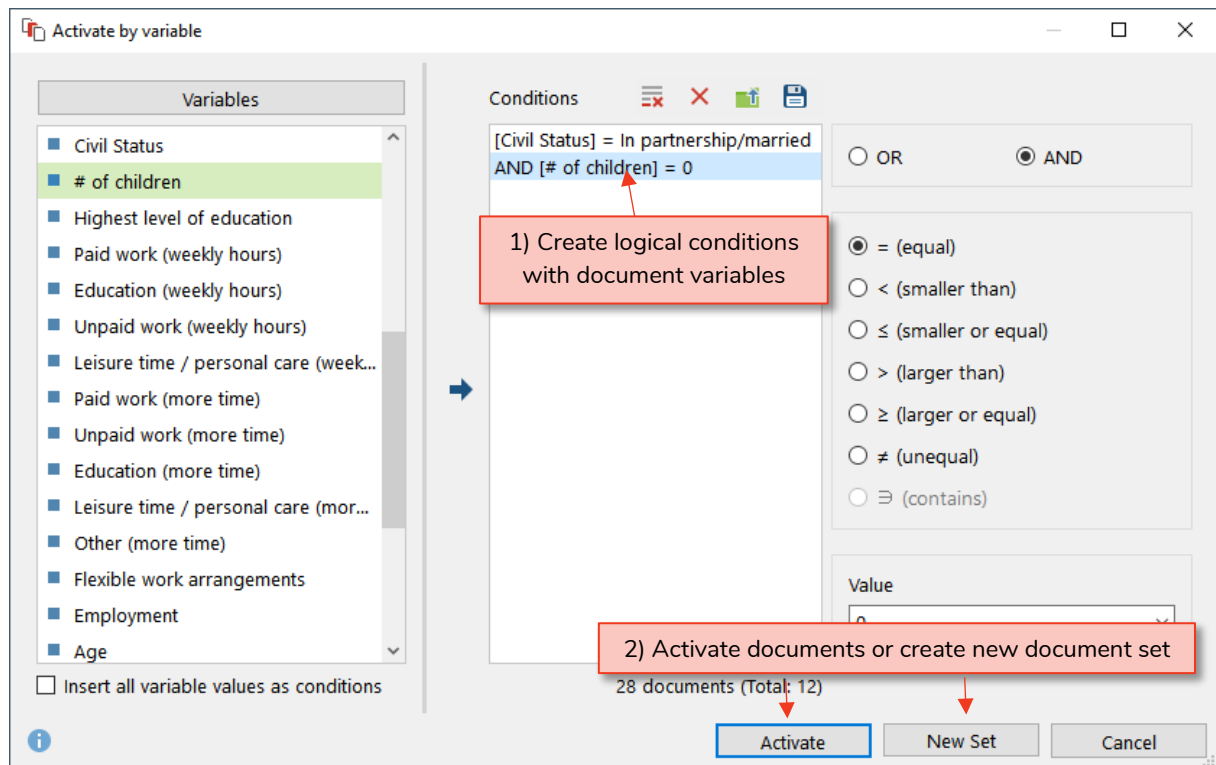
The screenshot shows the MAXQDA interface. On the left is the 'Code System' window, which shows a list of codes. A red box highlights the 'Transform into Document Variable' option in the context menu. On the right is the 'Document Variables' window, which shows a table of data for 55 documents. A red box highlights a row in the table with the text 'associated quantitative data in the Document Variables'.

Document group	Document name	Education
Interviews	Mateo	2
Interviews	Selim	1
Interviews	Riley	0
Interviews	Thanh	1

For example, this variable can be analyzed statistically or used for the selection of qualitative documents.

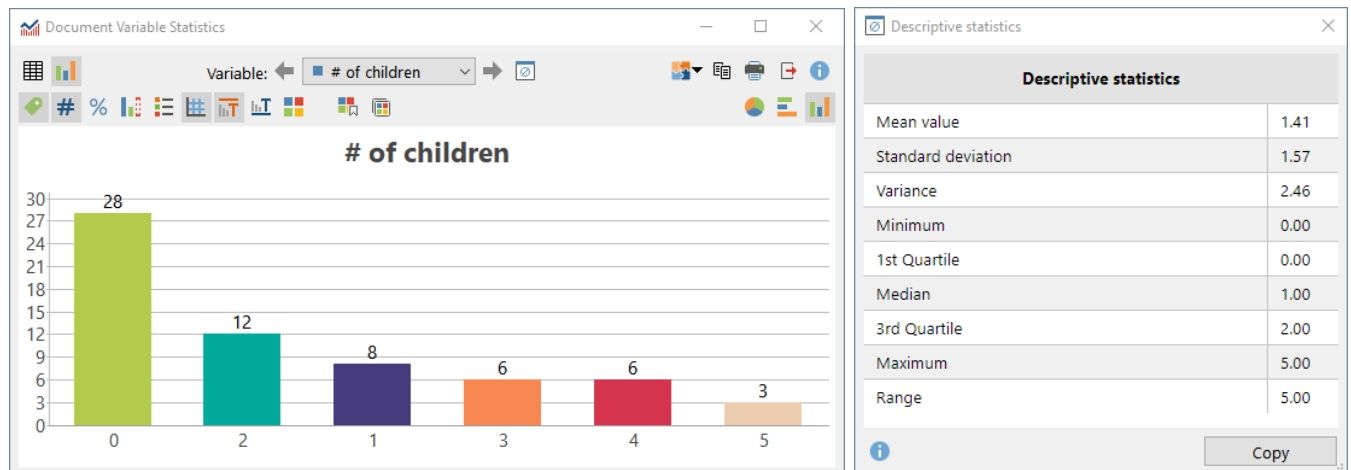
Activate Documents via Variables

The Mixed Methods > Activate Documents via Variables feature allows to select documents or to save groups of documents in the “Document System” for further analyses.



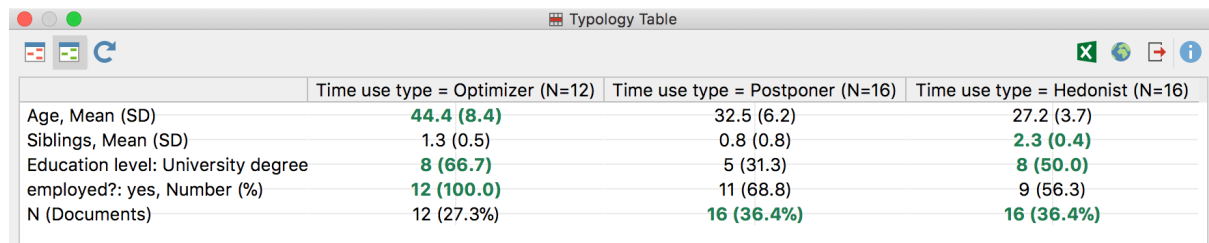
Statistics for document variables

The Document Variables > Statistics for Document Variables function can be used to create frequency tables and diagrams for variables. In addition, descriptive statistics can be requested.



Statistics for QUAL groups

Mixed Methods > Statistics for QUAL Groups generates the following table for the comparison of statistical characteristics for qualitatively formed groups:



	Time use type = Optimizer (N=12)	Time use type = Postponer (N=16)	Time use type = Hedonist (N=16)
Age, Mean (SD)	44.4 (8.4)	32.5 (6.2)	27.2 (3.7)
Siblings, Mean (SD)	1.3 (0.5)	0.8 (0.8)	2.3 (0.4)
Education level: University degree	8 (66.7)	5 (31.3)	8 (50.0)
employed?: yes, Number (%)	12 (100.0)	11 (68.8)	9 (56.3)
N (Documents)	12 (27.3%)	16 (36.4%)	16 (36.4%)

Columns = qualitatively formed groups (e.g., a typology)

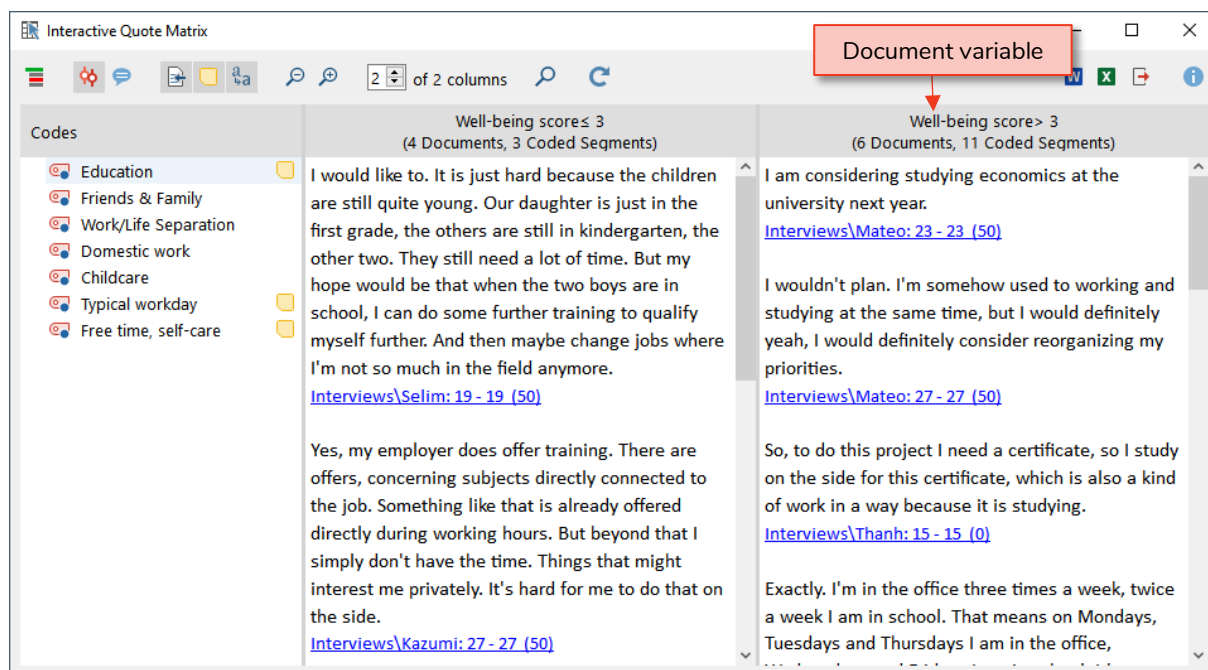
Lines = document variables (quantitative)

Cells = number and percentages or mean and standard deviation, depending on the variable.

Note: Using the Mixed Methods > Typology Table function, you create an identically structured table, the only difference is that for creating the columns document variables are used instead of codes.

Interactive Quote Matrix, QUAL Themes for QUAN Groups

Mixed Methods > Interactive Quote Matrix as well as Mixed Methods > QUAL Themes for QUAN Groups generates the following table for the comparison of coded segments or their summaries for quantitatively formed groups:



Codes	Well-being score ≤ 3 (4 Documents, 3 Coded Segments)	Well-being score > 3 (6 Documents, 11 Coded Segments)
Education	I would like to. It is just hard because the children are still quite young. Our daughter is just in the first grade, the others are still in kindergarten, the other two. They still need a lot of time. But my hope would be that when the two boys are in school, I can do some further training to qualify myself further. And then maybe change jobs where I'm not so much in the field anymore. Interviews\Selim: 19 - 19 (50)	I am considering studying economics at the university next year. Interviews\Mateo: 23 - 23 (50)
Friends & Family		I wouldn't plan. I'm somehow used to working and studying at the same time, but I would definitely yeah, I would definitely consider reorganizing my priorities. Interviews\Mateo: 27 - 27 (50)
Work/Life Separation	Yes, my employer does offer training. There are offers, concerning subjects directly connected to the job. Something like that is already offered directly during working hours. But beyond that I simply don't have the time. Things that might interest me privately. It's hard for me to do that on the side. Interviews\Kazumi: 27 - 27 (50)	So, to do this project I need a certificate, so I study on the side for this certificate, which is also a kind of work in a way because it is studying. Interviews\Thanh: 15 - 15 (0)
Domestic work		Exactly. I'm in the office three times a week, twice a week I am in school. That means on Mondays, Tuesdays and Thursdays I am in the office,
Childcare		
Typical workday		
Free time, self-care		

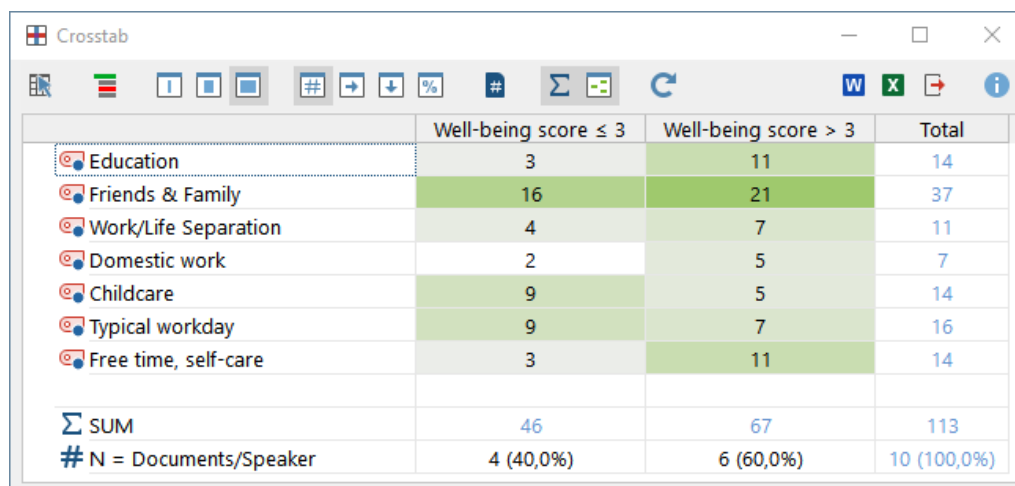
Columns = groups formed using document variables (quantitative)

Lines = Codes (qualitative)

Cells = coded segments or their summaries

Crosstab

Mixed Methods > Crosstab creates a table with the same structure as the Interactive Quote Matrix, but code frequencies are displayed in the cells:



	Well-being score ≤ 3	Well-being score > 3	Total
Education	3	11	14
Friends & Family	16	21	37
Work/Life Separation	4	7	11
Domestic work	2	5	7
Childcare	9	5	14
Typical workday	9	7	16
Free time, self-care	3	11	14
Σ SUM	46	67	113
# N = Documents/Speaker	4 (40,0%)	6 (60,0%)	10 (100,0%)

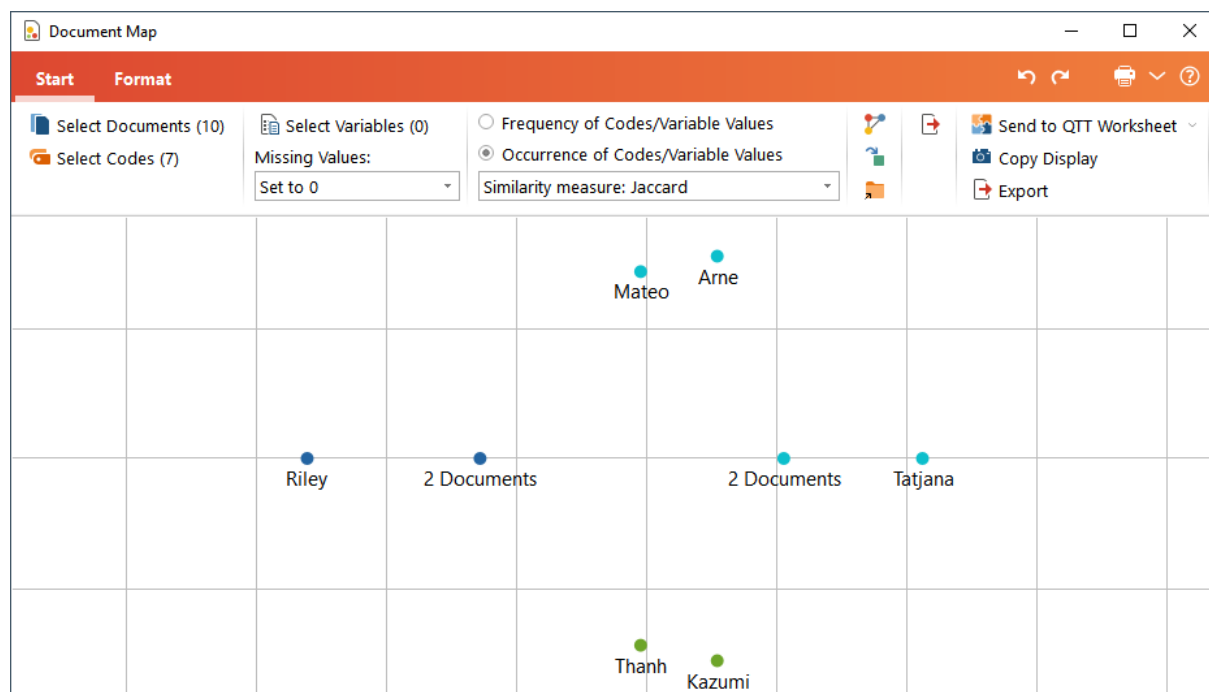
Similarity analysis for documents, document map

Mixed Methods > Similarity Analysis for Documents creates a “Documents x Documents” table. The cells are colored the more intensively the more similar two documents are in terms of assigned codes and variable values:



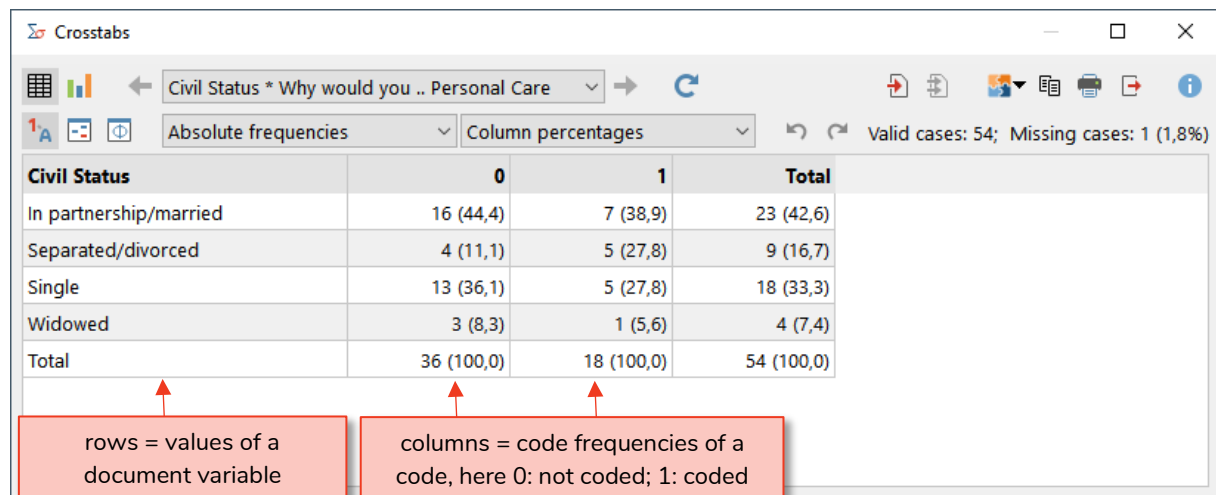
Analysis		Similarity matrix									
Name	Document name	Mateo	Selim	Riley	Thanh	Chris	Arne	Kazumi	Amadi	Tatjana	David
Similarity matrix	Interviews\Mateo	1,00	0,86	0,67	0,71	0,83	0,83	0,57	0,83	0,71	0,86
	Interviews\Selim	0,86	1,00	0,57	0,86	0,71	0,71	0,71	0,71	0,86	1,00
	Interviews\Riley	0,67	0,57	1,00	0,67	0,80	0,50	0,50	0,80	0,43	0,57
	Interviews\Thanh	0,71	0,86	0,67	1,00	0,83	0,57	0,83	0,83	0,71	0,86
	Interviews\Chris	0,83	0,71	0,80	0,83	1,00	0,67	0,67	1,00	0,57	0,71
	Interviews\Arne	0,83	0,71	0,50	0,57	0,67	1,00	0,67	0,67	0,57	0,71
	Interviews\Kazumi	0,57	0,71	0,50	0,83	0,67	0,67	1,00	0,67	0,57	0,71
	Interviews\Amadi	0,83	0,71	0,80	0,83	1,00	0,67	0,67	1,00	0,57	0,71
	Interviews\Tatjana	0,71	0,86	0,43	0,71	0,57	0,57	0,57	0,57	1,00	0,86
	Interviews\David	0,86	1,00	0,57	0,86	0,71	0,71	0,71	0,71	0,86	1,00

This data is used, for example, for Visual Tools > Document Map to place documents on a surface according to their similarity in terms of codes and/or variable values:



MAXQDA Stats

With the help of MAXQDA Stats (which is available for all MAXQDA Analytics Pro licenses) additional statistical functionalities and mixed methods features are available, e.g., statistical crosstabs with variables in the columns and codes in the rows, including association measures and grouped bar charts:



... and interactive connections of the quantitative and qualitative data in a project, e.g., a feature to save documents in a results table's cell as a document set:

Civil Status	0	1	Total
In partnership/married	16 (44,4)	7 (38,9)	23 (42,6)
Separated/divorced	4 (11,1)	5 (27,8)	9 (16,7)
Single	13 (36,1)	5 (27,8)	18 (33,3)
Widowed	3 (8,3)	1 (5,6)	4 (7,4)
Total	36 (100,0)	18 (100,0)	54 (100,0)

Context menu for the selected cell (16 (44,4)):

- Copy (Ctrl+C)
- Delete (Del)
- Save As Document Set
- Select All (Ctrl+A)

More information

- YouTube: https://www.youtube.com/results?search_query=maxqda+mixed+methods
- Online Manual: <https://www.maxqda.com/help-mx22/mixed-methods-functions/general>

Literature

- Kuckartz, U. & Rädiker, S. (2021). Using MAXQDA for mixed methods research. In R. B. Johnson & A. J. Onwuegbuzie (Eds.), *The Routledge reviewer's guide to mixed methods analysis* (pp. 305-318). Routledge. <https://doi.org/10.4324/9780203729434-26>
- Rädiker & Kuckartz (2019). Analyzing qualitative data with MAXQDA. Chapter 13. <https://doi.org/10.1007/978-3-030-15671-8>
- Rädiker, S. & Kuckartz, U. (2020). Analyzing open-ended survey questions with MAXQDA. MAXQDA Press. <https://doi.org/10.36192/978-3-948768027>