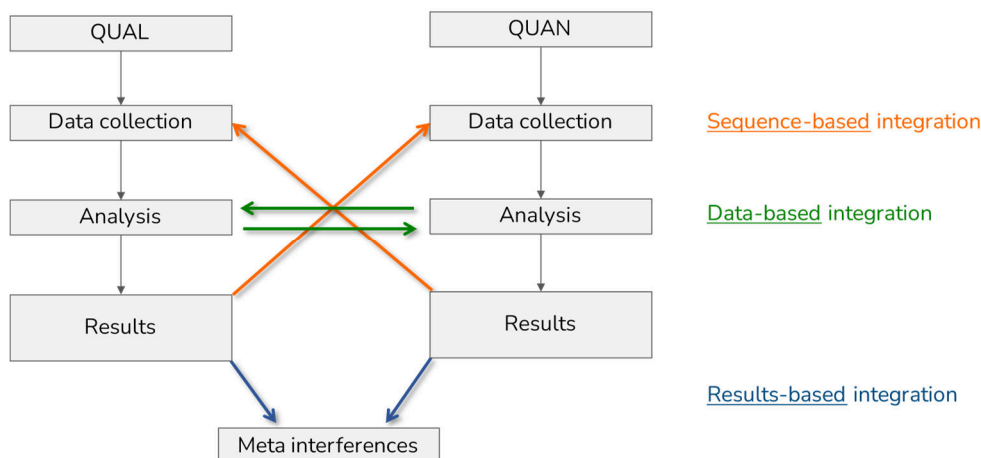


## Spotlight Session: Mixed Methods with MAXQDA

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

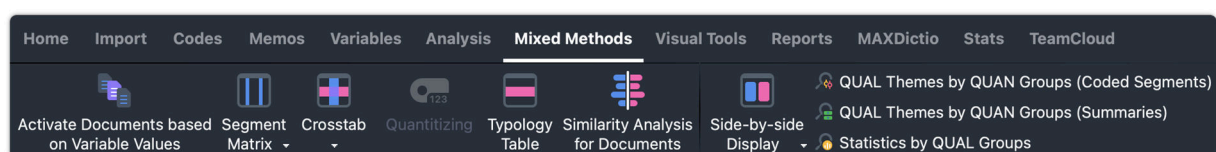
Kuckartz and Rädiker (2021, 2022) distinguish three forms of integration in mixed methods studies:



- *Sequence-based integration* occurs in sequential designs: the results of the qualitative or quantitative sub-study guide the subsequent sub-study, for example, the selection of cases or the development of an interview guideline or standardized questionnaire.
- *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.
- *Results-based integration* can be performed in any mixed methods project.

MAXQDA provides functions for all of these integration variants, but its greatest strength lies in data-based integration, where qualitative and quantitative data are analyzed together.

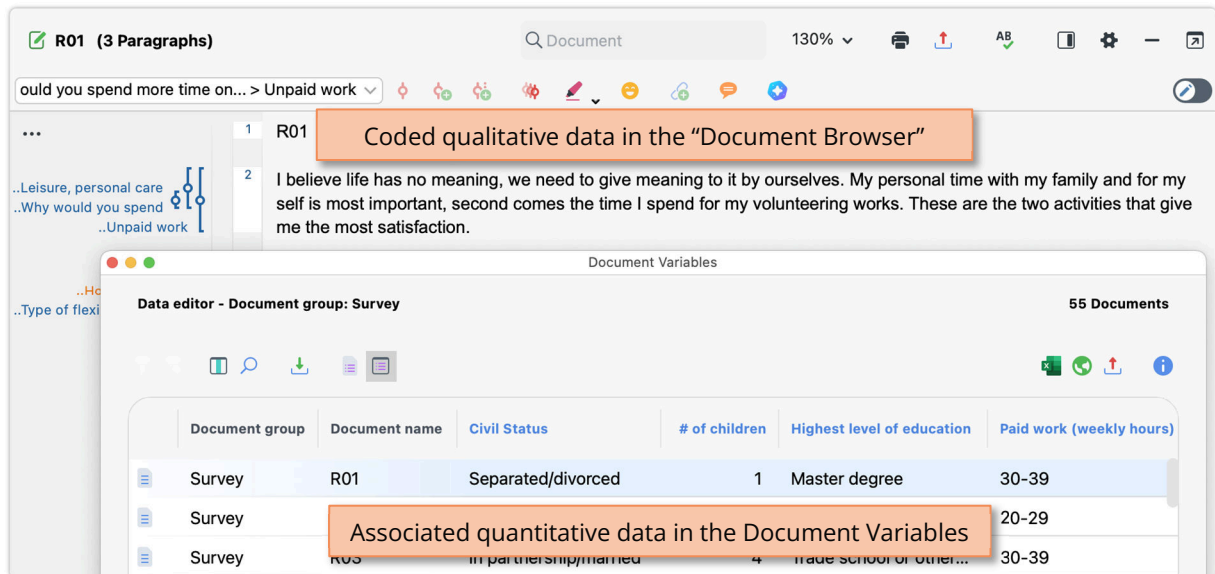
Most of the mixed methods functions can be found in MAXQDA's **Mixed Methods** menu tab:



Tip: All mixed methods functions presented here can also be usefully applied in many 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 (that is, mostly the cases) of a project, for example, 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:



**Coded qualitative data in the "Document Browser"**

ould you spend more time on... > Unpaid work

1 R01

2 I believe life has no meaning, we need to give meaning to it by ourselves. My personal time with my family and for my self is most important, second comes the time I spend for my volunteering works. These are the two activities that give me the most satisfaction.

**Document Variables**

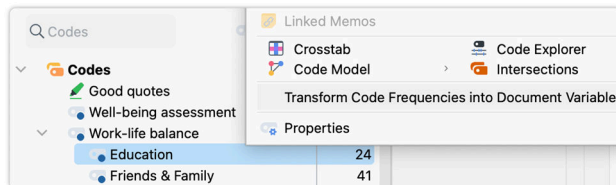
Data editor - Document group: Survey 55 Documents

Document group	Document name	Civil Status	# of children	Highest level of education	Paid work (weekly hours)
Survey	R01	Separated/divorced	1	Master degree	30-39
Survey	R02	In partnership/married	4	Trade school or other...	20-29
Survey	R03	In partnership/married	4	Trade school or other...	30-39

**Associated quantitative data in the Document Variables**

## Transform code into 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 Code Frequencies into Document Variable or Mixed Methods > Quantitizing):



Codes

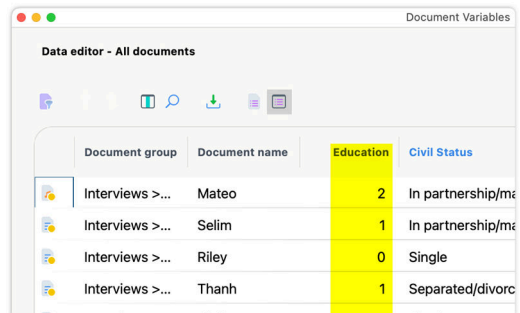
- Good quotes
- Well-being assessment
- Work-life balance
- Education
- Friends & Family

Linked Memos

- Crosstab
- Code Model
- Code Explorer
- Intersections
- Transform Code Frequencies into Document Variable
- Properties

Code	Frequency
Education	24
Friends & Family	41

Variables created this way can be analyzed statistically or used for the selection of qualitative documents.



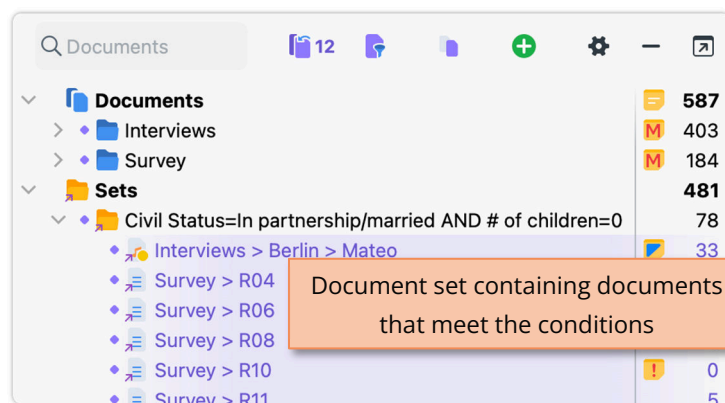
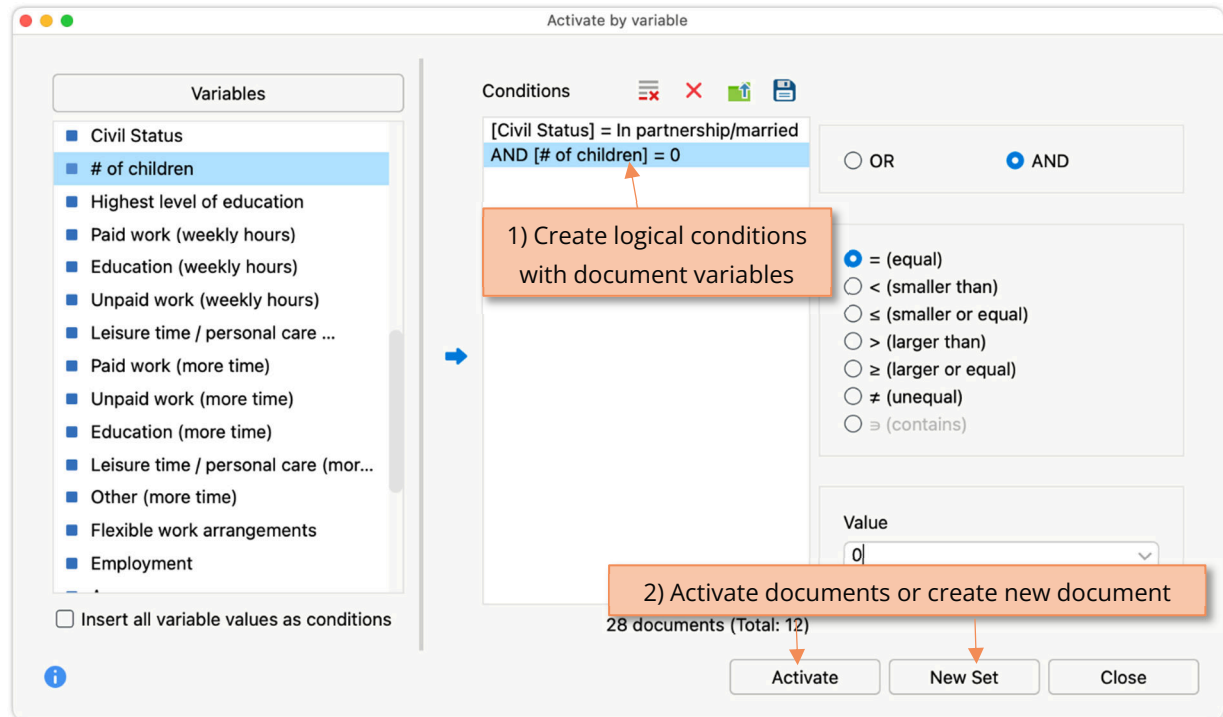
**Document Variables**

Data editor - All documents

Document group	Document name	Education	Civil Status
Interviews >...	Mateo	2	In partnership/m...
Interviews >...	Selim	1	In partnership/m...
Interviews >...	Riley	0	Single
Interviews >...	Thanh	1	Separated/divorc...

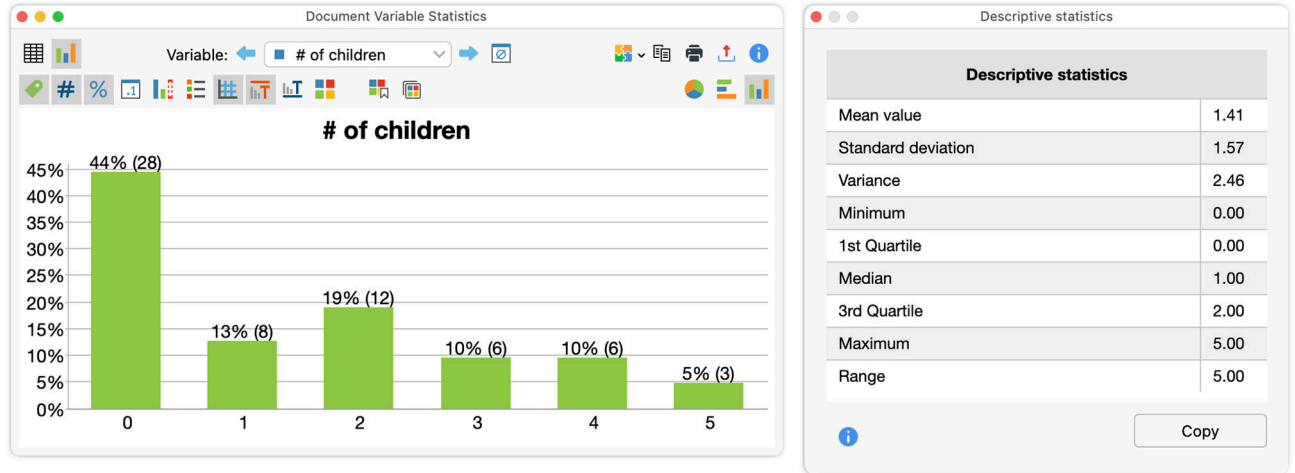
## Activate Documents via Variables

The [Mixed Methods > Activate Documents Based on Variable Values](#) feature allows you to select documents or to save groupings of documents as document sets in the “Document System” for further analyses.



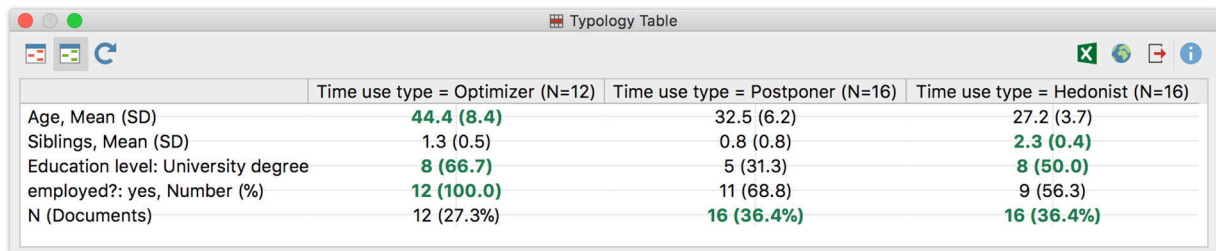
## Statistics for document variables

The [Document Variables > Document Variable Statistics](#) 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)

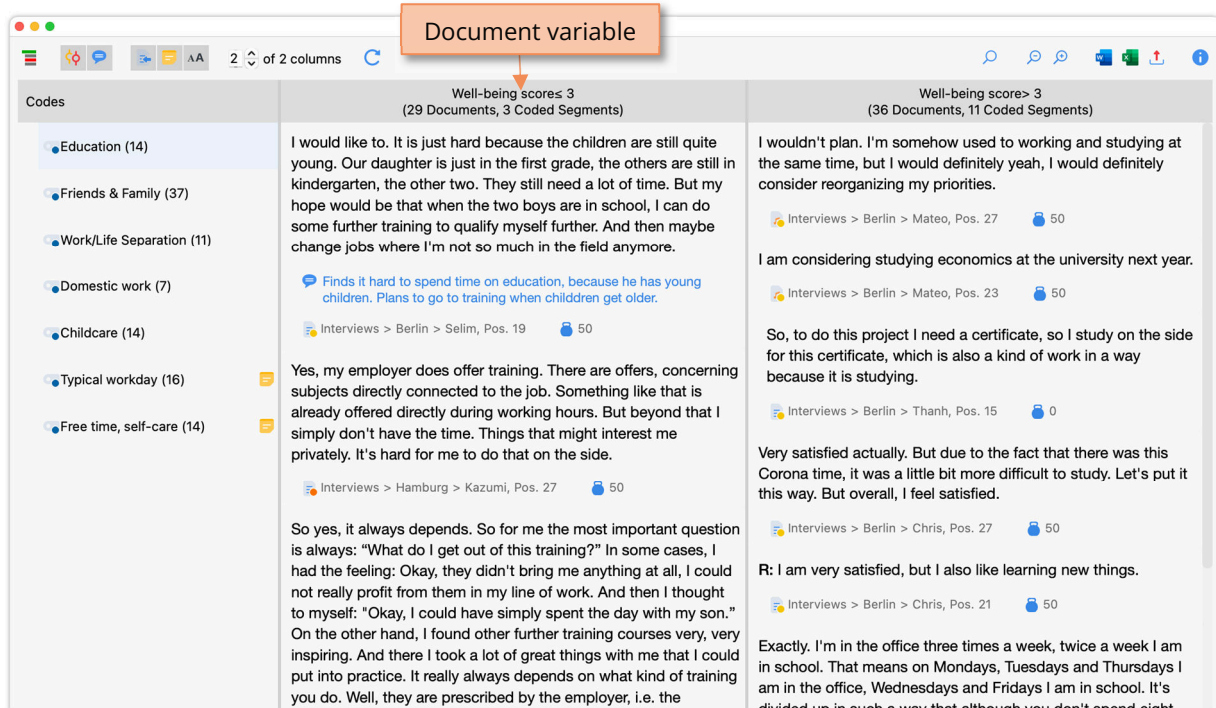
Rows = document variables (quantitative)

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 > Segment 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 scores 3 (29 Documents, 3 Coded Segments)	Well-being score > 3 (36 Documents, 11 Coded Segments)
Education (14)	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.  Finds it hard to spend time on education, because he has young children. Plans to go to training when children get older.  Interviews > Berlin > Selim, Pos. 19 50	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 > Berlin > Mateo, Pos. 27 50
Friends & Family (37)		I am considering studying economics at the university next year.  Interviews > Berlin > Mateo, Pos. 23 50
Work/Life Separation (11)		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 > Berlin > Thanh, Pos. 15 0
Domestic work (7)	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 > Hamburg > Kazumi, Pos. 27 50	Very satisfied actually. But due to the fact that there was this Corona time, it was a little bit more difficult to study. Let's put it this way. But overall, I feel satisfied.  Interviews > Berlin > Chris, Pos. 27 50
Childcare (14)	So yes, it always depends. So for me the most important question is always: "What do I get out of this training?" In some cases, I had the feeling: Okay, they didn't bring me anything at all, I could not really profit from them in my line of work. And then I thought to myself: "Okay, I could have simply spent the day with my son." On the other hand, I found other further training courses very, very inspiring. And there I took a lot of great things with me that I could put into practice. It really always depends on what kind of training you do. Well, they are prescribed by the employer, i.e. the	R: I am very satisfied, but I also like learning new things.  Interviews > Berlin > Chris, Pos. 21 50
Typical workday (16)		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, Wednesdays and Fridays I am in school. It's divided up in such a way that although you don't spend eight
Free time, self-care (14)		

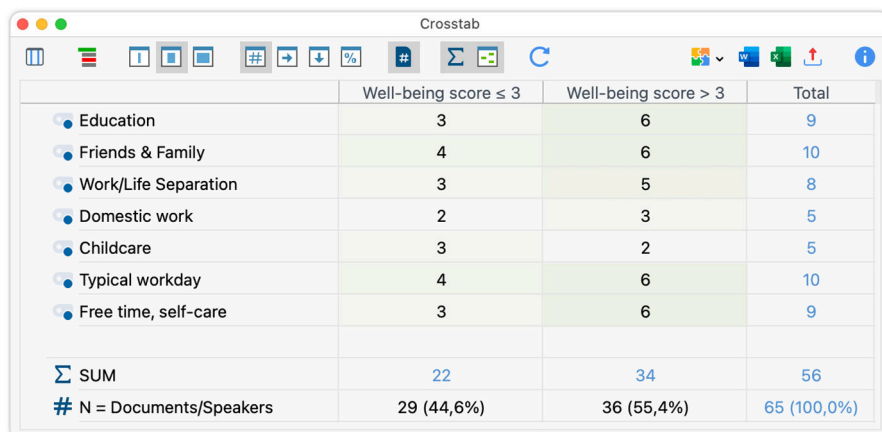
Columns = groups formed using document variables (quantitative)

Rows = Codes (qualitative)

Cells = coded segments or their summaries

## Crosstab

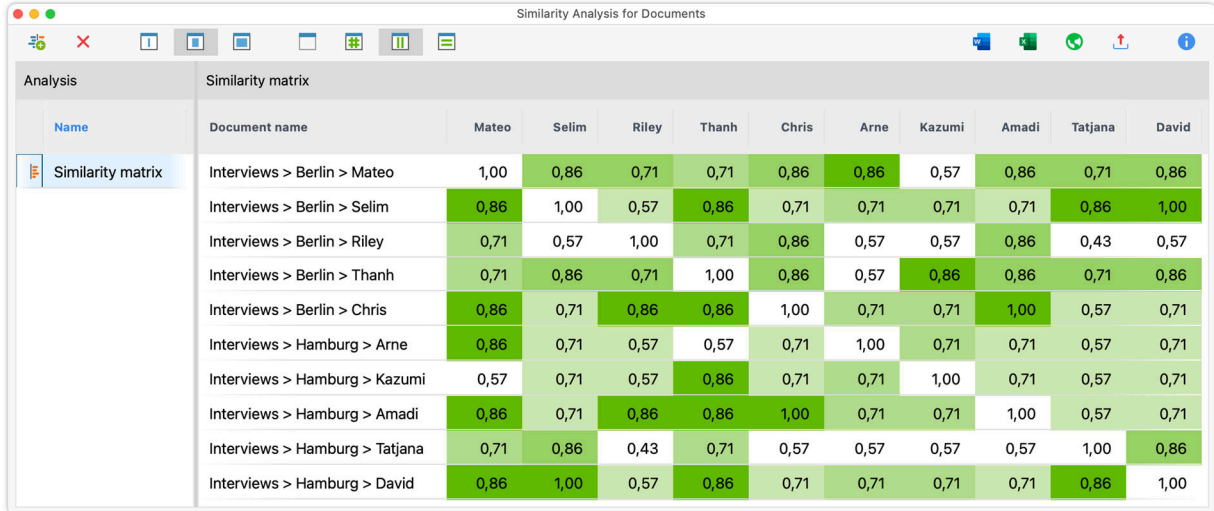
Mixed Methods > Crosstab creates a table with the same structure as the Interactive Quote Matrix, but code frequencies are displayed in the cells:



	Well-being score ≤ 3	Well-being score > 3	Total
Education	3	6	9
Friends & Family	4	6	10
Work/Life Separation	3	5	8
Domestic work	2	3	5
Childcare	3	2	5
Typical workday	4	6	10
Free time, self-care	3	6	9
<b>Σ SUM</b>	<b>22</b>	<b>34</b>	<b>56</b>
<b># N = Documents/Speakers</b>	<b>29 (44,6%)</b>	<b>36 (55,4%)</b>	<b>65 (100,0%)</b>

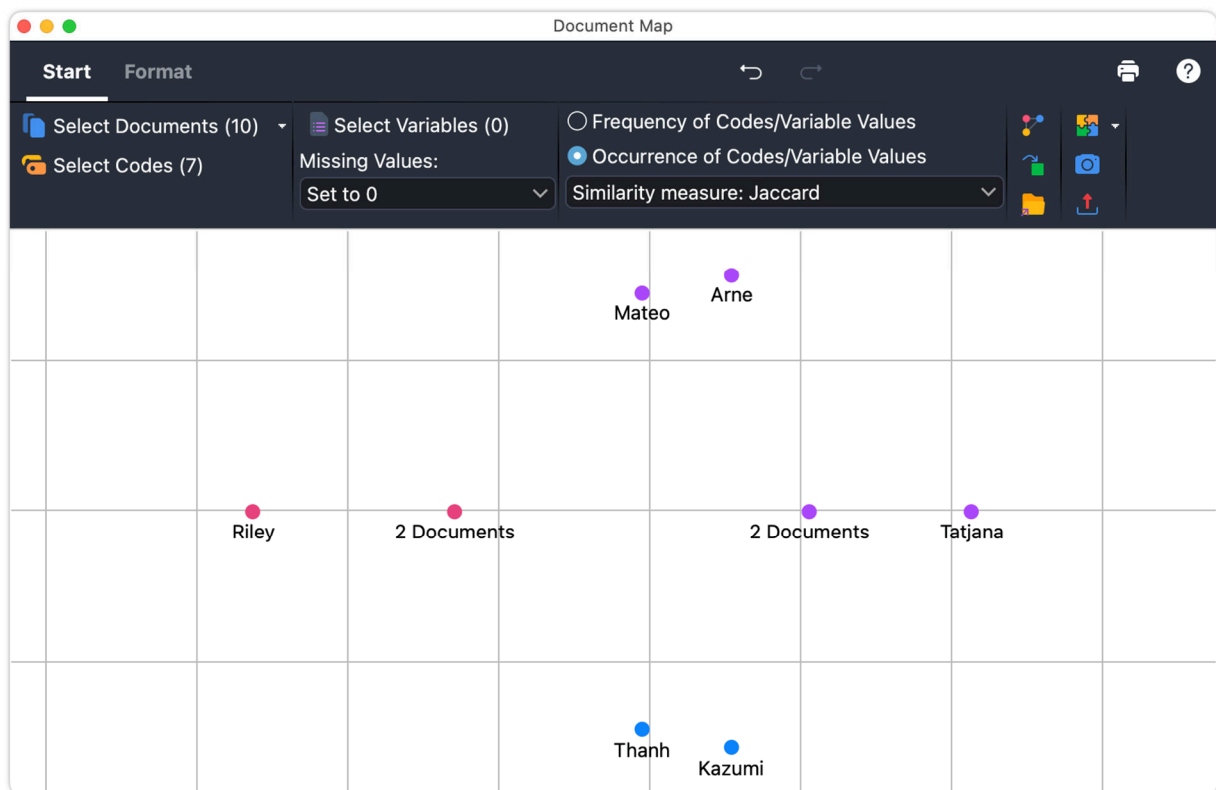
## Similarity analysis for documents, document map

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 > Berlin > Mateo	1,00	0,86	0,71	0,71	0,86	0,86	0,57	0,86	0,71	0,86
	Interviews > Berlin > Selim	0,86	1,00	0,57	0,86	0,71	0,71	0,71	0,71	0,86	1,00
	Interviews > Berlin > Riley	0,71	0,57	1,00	0,71	0,86	0,57	0,57	0,86	0,43	0,57
	Interviews > Berlin > Thanh	0,71	0,86	0,71	1,00	0,86	0,57	0,86	0,86	0,71	0,86
	Interviews > Berlin > Chris	0,86	0,71	0,86	0,86	1,00	0,71	0,71	1,00	0,57	0,71
	Interviews > Hamburg > Arne	0,86	0,71	0,57	0,57	0,71	1,00	0,71	0,71	0,57	0,71
	Interviews > Hamburg > Kazumi	0,57	0,71	0,57	0,86	0,71	0,71	1,00	0,71	0,57	0,71
	Interviews > Hamburg > Amadi	0,86	0,71	0,86	0,86	1,00	0,71	0,71	1,00	0,57	0,71
	Interviews > Hamburg > Tatjana	0,71	0,86	0,43	0,71	0,57	0,57	0,57	0,57	1,00	0,86
	Interviews > Hamburg > David	0,86	1,00	0,57	0,86	0,71	0,71	0,71	0,71	0,86	1,00

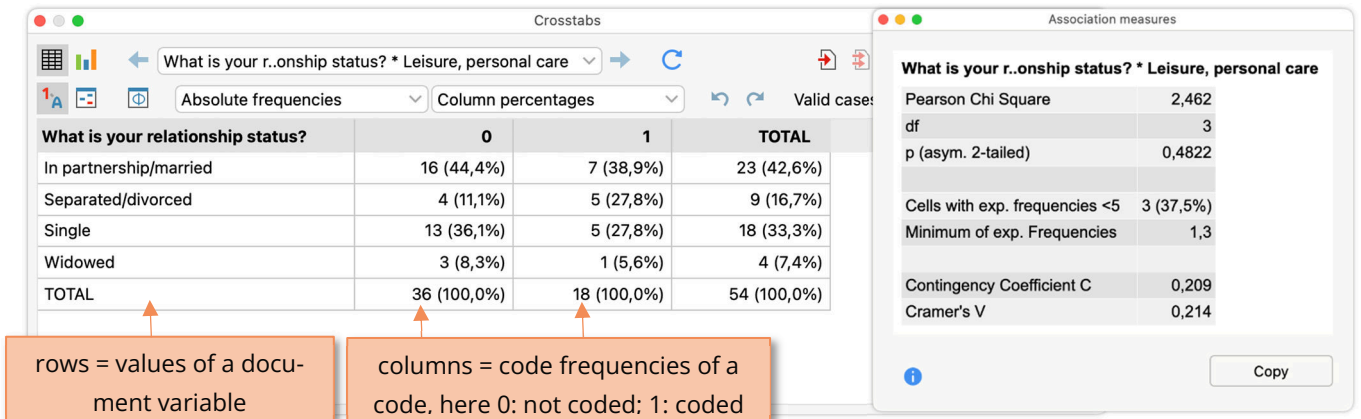
This data is used, for example, for [Visual Tools > Document Map](#) to place documents on a map according to their similarity in terms of codes and/or variable values:





## 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, for example, statistical cross-tabs 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, for example, a feature to save documents in a results table's cell as a document set:

What is your relationship 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%)

Copy  
 Delete  
 Save As Document Set  
 Use as Filter in Data Editor  
 Select All

## More information

- YouTube: [https://www.youtube.com/results?search\\_query=maxqda+mixed+methods](https://www.youtube.com/results?search_query=maxqda+mixed+methods)
- Online Manual: <https://www.maxqda.com/help-mx24/mixed-methods/general>

## References

- 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>
- 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 (S. 305–318). Routledge. <https://doi.org/10.4324/9780203729434-26>
- Kuckartz, U., & Rädiker, S. (2022). Using MAXQDA for integration in mixed methods. In J. H. Hitchcock & A. J. Onwuegbuzie, The Routledge handbook for advancing integration in mixed methods research (S. 540–562). Routledge. <https://doi.org/10.4324/9780429432828>

## Research Examples

Silver, Christina (2024). Using MAXQDA to analyze open-ended survey responses: An example from an evaluation project. In: S. Rädiker & M. C. Gizzi (Eds.), *The practice of qualitative data analysis. Research examples using MAXQDA*, volume 2 (pp. 87–106). Berlin: MAXQDA Press.

[https://doi.org/10.36192/978-3-948768188\\_5](https://doi.org/10.36192/978-3-948768188_5)

Toraman Turk, Sinem (2024). Using MAXQDA for mixed methods research: An example integrating interview, survey, and social network data. In: S. Rädiker & M. C. Gizzi (Eds.), *The practice of qualitative data analysis. Research examples using MAXQDA*, volume 2 (pp. 107-126). MAXQDA Press. [https://doi.org/10.36192/978-3-948768188\\_6](https://doi.org/10.36192/978-3-948768188_6)