



Mixed methods approaches are becoming increasingly popular in practical empirical research. At the beginning of the 2000s, a global and interdisciplinary mixed methods community was formed, presenting mixed methods approaches and research projects at many international conferences. A large number of publications and textbooks were written, and a special journal, the *Journal of Mixed Methods Research* (JMMR), was founded in 2007. How can mixed methods data analysis be implemented within MAXQDA? Since the first program versions, MAXQDA has always paid great attention to the combination and integration of methods. Thus, from the very beginning of the program, it was possible to manage an associated data set of quantitative data parallel to the qualitative data and to link qualitative and quantitative data during the analysis. Special functions for mixed methods research are summarized in a separate ribbon tab “Mixed Methods”; these functions are the subject of this chapter.

## In This Chapter

- Integration during analysis as a challenge for mixed methods approaches
- Combination of qualitative and quantitative data in MAXQDA
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## Integration as a Challenge of Mixed Methods Research

For a long time, literature on mixed methods has focused on questions of research design and the development of design typologies (Creswell & Plano Clark, 2011; Morgan, 2014; Teddlie & Tashakkori, 2009). The question of the fundamental compatibility of qualitative and quantitative paradigms has also been discussed repeatedly as has been, in this context, the question of what is to be understood by a paradigm at all (Creswell, 2016; Morgan, 2007). In comparison, relatively little attention has been paid to the analysis of mixed methods data. However, a number of scholars have been dealing with questions of data analysis in mixed methods research for some time. These include Pat Bazeley (2009, 2013, 2017) and Tony Onwuegbuzie (Onwuegbuzie & Dickinson, 2008; Onwuegbuzie, Slate, Leech, & Collins, 2009; Onwuegbuzie & Teddlie, 2003). Kuckartz (2017) also deals extensively with the topic of data analysis in mixed methods research and gives numerous examples. At this point we will restrict ourselves to references to these methodological texts, especially to the special issue “Mixed Methods” of the *Cologne Journal for Sociology and Social Psychology* (Baur, Kelle, & Kuckartz, 2017), because a detailed treatment of this topic would go beyond the scope of this book.

The fact that the mixed methods literature now increasingly focuses on the phase of data analysis can certainly be interpreted as a sign of the growing maturity of this approach. The crucial point in the analysis phase is the integration of the two research lines; Creswell (2015, p. 75) formulated the following definition:

Integration refers to how one brings together the qualitative and quantitative results in a mixed methods study. The way the researcher combines the data needs to relate to the type of mixed methods design used.

Tashakkori and Teddlie (2003) formed the term “meta inferences” in this context, with the help of which the conclusions of both studies—or “strands,” as it is often called in the literature—are to be integrated into a coherent whole. Some authors have already described integration as a key aspect of mixed methods research at an early stage, for example, Bryman (2006) and Collins et al., who spoke of the “integration challenge,” a formulation that was also taken up again by Fetters and Freshwater (2015) in the *JMMR* editorial in 2014. There they explicitly demanded that all future contributions submitted to the *JMMR* must meet this challenge of integration and clearly formulate what analytical benefits will be achieved compared to “monostrand research.”

In the following, the relevant “points of integration” for the mixing in the data analysis phase are considered; possible integration strategies are shown, and their implementation with MAXQDA is discussed. Special forms of integrative display, the “joint displays” (Creswell & Plano Clark, 2018, pp. 227–232; Guetterman, Creswell, & Kuckartz, 2015), perform a special role here. These support the presentation, integration, and analysis of qualitative and quantitative data and results. In a review article by Guetterman et al. (2015), 11 different joint displays and their application in different mixed methods designs are presented; most of these joint displays are now implemented in MAXQDA.

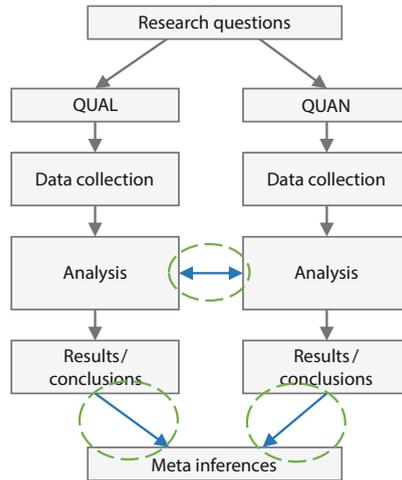
## Combining Qualitative and Quantitative Data in MAXQDA

Before we specifically discuss the combination of qualitative and quantitative data in MAXQDA, it makes sense to consider the different motivations for the choice of a mixed methods approach. Greene, Caracelli, and Graham (2008, p. 127) identified five different tasks of mixed methods purposes in an often quoted paper:

- *Triangulation* aims at convergence, the agreement of the results of both research strands; this is the classical perspective of validating research results by including a second perspective.
- *Complementarity* aims to complement, illustrate, and better understand the results of one method through the results of a second study using different methodology. This is therefore about a more complete picture, a better understanding, and thus a more comprehensive answer to the research question. Other authors also speak here of the motif of *additional coverage*.
- *Development* means that the results of a method are used to develop or improve a subsequent study. The goal of the development can refer both to the sampling strategy and directly to the development of instruments (e.g., a questionnaire).
- *Initiation* aims at the discovery of contradictions and paradoxical results. The research results are reconsidered and “reread” from the perspective of another method, which may lead to new conclusions.
- *Expansion* aims to broaden the breadth and scope of research by using the most appropriate methods for the components of research.

The combination of methods is associated with the claim (or hope) that more than the sum of the individual parts, “QUAL” + “QUAN”, can be achieved (Bazeley, 2010, p. 432; Bryman, 2007; Woolley, 2009). To identify the points of integration between QUAL and QUAN, we first take a look at a classic parallel design, often also referred to as “convergent design” (Fig. 13.1). This is typically chosen for the first of the above motivations (triangulation). With such a design, integration can be based on the data or on the results; the former assumes that both data types are available to the research participants: for example, people took part in narrative interviews and also completed a standardized questionnaire.

So how do we link the two types of data for each person? In MAXQDA the identification is done by means of the variables “document name” and “document group.” Whenever a new document with qualitative data (such as a narrative interview) is imported into MAXQDA, so-called system variables are defined at the same time: for the imported document, the name of the document group into which it was imported, and the document name are saved. When adding a corresponding data set with quantitative data (e.g., sociodemographic variables) from an Excel or SPSS file using the routine **Variables > Import Document Variables** (see Chap. 10), this must contain two variables called “document name” and “document group.” If the names of the document and document group are identical in both data sources, MAXQDA links the qualitative data with the quantitative data.



**Fig. 13.1** Points of integration in parallel design (highlighted with circles)

## Possibilities and Strategies for Integration in MAXQDA

MAXQDA's special analysis functions for mixed methods approaches are summarized in the ribbon tab *Mixed Methods* (Fig. 13.2).

A simple way of integrating quantitative and qualitative data is already created by the option *Activate via document variables*. In this way, the variables of the quantitative data set are used for targeted access to the qualitative data. This is done by formulating one or more logical conditions according to the “Variable Operator Value” pattern. How this has to be done is described in Chap. 12. The logical conditions can be simple, for example, if only a certain characteristic of a variable serves as a selection criterion (“membership in the liberal party = yes”), but they can also combine two or more variables (“gender = female” and “membership in the liberal party = yes”) or be the result of a preceding statistical calculation (“value on the factor conservatism > 1.96”). For integrative data analysis, it is particularly interesting that the selection of documents created by activating them via document variables can be saved in MAXQDA as “document sets” and are thus available for later analyses without the groups having to be formed again by formulating the selection conditions for each analysis.



**Fig. 13.2** The various functions of the “Mixed Methods” tab

In addition to this simple way of combining quantitative and qualitative data, a large number of integration strategies exist. With each new version of the program, MAXQDA has extended the set of tools with which these strategies can be realized.

Numerous authors have dealt with theoretical questions of integration and practical integration strategies (Bazeley, 2012; Creswell, 2015; Creswell & Plano Clark, 2011; Erzberger & Kelle, 2003; Guetterman et al., 2015; Kelle, 2007; Onwuegbuzie & Teddlie, 2003; Plano Clark & Ivankova, 2016). Three types of integration strategies are distinguished below: results-based, data-based, and sequence-oriented strategies (Kuckartz, 2017). The first two types are described in more detail in the following.

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## Results-Based Integration Strategies

One way of integrating qualitative and quantitative studies is to link the results of the two studies. This is the adequate variant of integration when data from studies with two independent samples are analyzed in the context of a triangulation design. In this case, the comparison of the findings can achieve the objective of increased validity because it only takes place after those findings have been made. Two integration strategies can be used, and corresponding joint displays can be created: firstly, the results of both sub-studies can be connected with the help of hyperlinks and, secondly, results can be compared in a table.

### Linking of Results via Hyperlinks

The integration strategy of connecting text passages of both research strands via hyperlinks is the first choice when little time is available for the analysis phase. For both parts of the study, written reports, or at least analytical outputs such as frequency counts or statistical tables, must be available.

The task now is to link the respective results of both studies with respect to the topics most interesting for comparison. In MAXQDA this is done as follows:

1. The report with the results of the qualitative study is opened in the “Document Browser.”
2. The report with the results of the quantitative study is opened in a second “Document Browser” (by right-clicking on the document name and selecting the function of the same name from the context menu).
3. Both “Document Browsers” are arranged next to each other.
4. The local search function of the first “Document Browser” is used to find topics of interest (e.g., “personal contribution to climate protection”) within that document using suitable search terms.
5. The local search function in the second “Document Browser” is used to find corresponding content.
6. The relevant text passages of the qualitative and quantitative results report are linked using “document links”; to do this, the text passages are marked, and from the context menu, *Insert Document Link* is selected.

The links in MAXQDA have the same function as hyperlinks in an Internet browser. When a link is clicked later, MAXQDA jumps to the corresponding target position, in this case to the corresponding statements of the study of the other method branch. The inserted links provide a net-like structure over the two research reports, which is very useful for the drafting of the final integrative report. Significant text passages can be copied for the joint presentation of both results and contrasted in the results report.

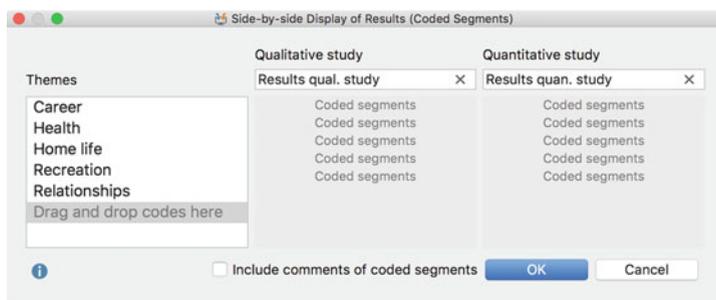
### Side-by-Side Display of Results for Coded Segments

While the technique of linking the results is immediately available, the technique of contrasting the results of both studies in tabular form requires some preparatory work; both research reports or result materials must first be thematically coded (Creswell & Plano Clark, 2018, pp. 228–232; Kuckartz, 2014b, pp. 69–88), whereby the research questions determine the thematic codes. This means that not only the results report of the qualitative study but also the results report of the quantitative study is reviewed with regard to the occurrence of the topics of interest; the relevant text passages are marked and coded with the corresponding thematic code. The search functions of MAXQDA can also be used in this procedure to search for specific terms. It is also possible to automatically code the text passages found. If no written reports on the results of the two sub-studies are yet available, the existing preparatory work can be used instead. For example, the statistical tables can be coded for the quantitative results.

In the start dialog, which appears after calling the function *Mixed Methods > Side-by-side Display > ... of Results (Coded Segments)*, the two reports are dragged from the “Document System” window into the corresponding fields of the dialog by clicking and dragging with the mouse. The same happens with the codes of interest: these are dragged from the “Code System” window into the left field “Themes” (Fig. 13.3).

### Side-by-Side Display of Results for Summaries

If the reports contain many pages, as is the case with larger studies such as the Eurobarometer studies, the tabular comparison of the coded segments with the topics



**Fig. 13.3** The dialog to create a side-by-side display of the results

of interest may become very extensive. In the case of very important topics, it can also happen that many passages of text are coded throughout the report, but some of these may be quite redundant. In this case it can be very useful to first write thematic summaries with the function *Analysis* > *Summary Grid* (see Chap. 11) and then use these thematic summaries in place of the original text passages in the side-by-side displays. Another advantage of this method is that the tables created in this way already have a very high degree of compression, so that they can be easily transferred to the final integrative report without major changes.

After selecting the option *Mixed Methods* > *Side-by-side Display of Results (Summaries)*, the same dialog appears as for the side-by-side display of the coded segments of the original text: the two reports and the codes of interest are dragged with the mouse into the corresponding dialog boxes.

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## Data-Based Integration Strategies

### Transformation of Qualitative Data into Quantitative Data: Quantitizing

The conversion of qualitative, i.e., linguistic, information into a number is also called “quantitizing.” This is a process that respondents already practice (unconsciously) when they convert their answer to a certain statement into a numerical value in a standardized survey and, for example, tick the value “7” on a scale from “(0) total rejection” to “(10) total approval.”

A good example of the strategy of quantitizing is the mixed methods study by Fölling-Albers and Meidenbauer (see Kuckartz, 2014a, pp. 89–90), which examines which aspects of teaching students still remember in the evening. The study by Mayring, König, Birk, and Hurst (2000, pp. 28–30) on teacher unemployment in the new states of the unified Germany also transforms qualitative information into numbers. How is the quantification done in practice with MAXQDA? Whenever you code a segment, MAXQDA increases the count of how often the code is assigned to the document. The total number of all assignments of a code is visible beside each code in the “Code System” and beside each document in the “Document System.” This creates a matrix of “documents by codes” in the background without the user noticing. This matrix or parts of it can be displayed with the “Code Matrix Browser” (called in the ribbon tab *Visual Tools*). If a code is now to be transformed into a quantitative variable, simply click on it and select the *Transform into Document Variable* option in the context menu (see Chap. 10). A new variable is created, and the code name is selected as the name for the new variable. The frequencies of coding with this code are stored as values of the variables for each document and can then be statistically analyzed. The MAXQDA module “Stats,” which is not described in this book, can be particularly useful for analyses using mixed methods. “Stats” is only included in the “MAXQDA Analytics Pro” version and can be used directly with the code frequencies, i.e., without converting code frequencies into variable values. Stats allows the combination of quantitative data

with the quantified qualitative data and offers a variety of descriptive and inferential statistical methods.<sup>1</sup>

Quantifying qualitative data is a common integration strategy. Kuckartz (2014a), Sandelowski, Voils, and Knafelz (2009), and Vogl (2017) deal in great detail with the different possibilities of quantification.

### **Qualitative Exploration of Extreme Cases of the Quantitative Study**

This integration strategy of QUAL and QUAN identifies extreme cases, mostly on the basis of quantitative data. Then the qualitative data, focused on certain important topics, are analyzed in detail for these extreme cases (Creswell & Plano Clark, 2018, p. 235; Bazeley, 2012, p. 821). MAXQDA makes it easy to find extreme cases even with large samples: click on the column heading of the desired variable (e.g., the factor value for “Neuroticism”) in the “Data Editor,” and all rows (i.e., documents) are then sorted in ascending or descending order. In the first and last rows, after sorting, you will find the persons with particularly high and particularly low values on the factor “neuroticism.” If you click on the rows, the documents are also highlighted in the “Document System” (with a blue bar); they can now be compared with each other and you can compare their statements on specific topics using the *Compare Groups* function on the *Analysis* ribbon tab.

The possibility described above of transforming codes into document variables opens up the possibility of also using the code frequencies to identify extreme cases. After the transformation and sorting of the table, it is easy to identify the people who have talked about a specific topic extremely frequently during the interview.

### **Compare Statements on Qualitative Topics According to Quantitative Groups**

This integration strategy requires qualitative and quantitative data to be collected for the same research units. In many cases, sociodemographic variables are included in the analysis as categorical variables, but they can also be scale or index values for which a categorization is previously carried out; corresponding examples can be found in Guetterman et al. (2015) and Creswell and Plano Clark (2018). In this strategy and the corresponding joint displays, the quantitative data serve to group the qualitative data, e.g., thematic statements from qualitative interviews are broken down separately according to an educational level recorded by a questionnaire used at the same time (university degree, high school diploma, intermediate school leaving certificate, lower secondary school leaving certificate). In principle, all variables of the quantitative study can be used as grouping variables; for metric variables, a meaningful reduction to a manageable number of categories must first be made. This type of joint display can be generated using *Mixed Methods > Quote Matrix > Quote Matrix with Coded Segments* or *Mixed Methods > QUAL Themes for QUAN Groups*; a schematic representation of the result is shown in Fig. 13.4.

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<sup>1</sup>Further information on the functionality and mode of operation of the “Stats” module can be found, for example, in the online manual: [www.maxqda.com/products/maxqda-analytics-pro](http://www.maxqda.com/products/maxqda-analytics-pro).

Variable: Awareness of climate change			
Code	High (N=5)	Moderate (N=12)	Low (N=4)
Personal behavior	Segments of this group coded with the code "Personal behavior"	Segments of this group coded with the code "Personal behavior"	Segments of this group coded with the code "Personal behavior"
Personal acceptance of responsibility	Segments of this group coded with the code "Personal acceptance of responsibility"	Segments of this group coded with the code "Personal acceptance of responsibility"	Segments of this group coded with the code "Personal acceptance of responsibility"

Fig. 13.4 Schematic structure of the display “qualitative themes for quantitative groups”

### Quantitative Analysis of Code Frequencies Broken Down by Groups: Crosstabulations

This integration strategy or the joint display implementing this strategy has the same formal structure as the display described above, but now the cells of the matrix do not contain the text passages themselves, but only the information about the respective number of encodings. How many people with a certain variable value (such as university degree) talk about a certain topic (qualitative data), and how many text passages are coded? Do more people with a university degree talk about the influence of global problems than people with low education, and do they do this more often in the course of the interview? This aggregated numerical presentation corresponds to the logic of a statistical crosstabulation. With the help of row and column percentages, the respective comparative figures can be determined, and with the help of a chi-square test, it can be checked against the probability that this distribution across the different categories could also occur randomly. An example from social science environmental research can be found in Kuckartz (2014a, pp. 140–142). To create such a crosstabulation, choose *Mixed Methods > Crosstab*. The codes that you want to include in the group comparison must be activated before the call. After the start of the crosstab function, the groups that are to form the columns in the table are defined on the basis of variable values, e.g., awareness of climate change, high; awareness of climate change, moderate; and awareness of climate change, low (Fig. 13.5).

Variable: Awareness of climate change			
Code	High (N=5)	Moderate (N=12)	Low (N=4)
Personal behavior	Number of segments in this group coded with the code "Personal behavior"	Number of segments in this group coded with the code "Personal behavior"	Number of segments in this group coded with the code "Personal behavior"
Personal acceptance of responsibility	Number of segments in this group coded with the code "Personal acceptance of responsibility"	Number of segments in this group coded with the code "Personal acceptance of responsibility"	Number of segments in this group coded with the code "Personal acceptance of responsibility"
Documents	N (%)	N (%)	N (%)

Fig. 13.5 Schematic structure of the display “number of coded segments for quantitative groups”

The cells of this display show the code frequencies per group. You can choose whether the absolute or the percentage frequencies (related to columns or rows) are listed. To prevent people for whom a code has been coded very often from distorting the result, it can be determined that coded segments are counted only once per document; now the frequency of a code in a particular group cannot be greater than its group size. The option of coloring the cells of the table depending on the code frequencies is particularly useful for large tables. In this way, the group-related differences can be identified at first glance.

### Statistical Analysis of Quantitative Data Differentiated by Typology: The Typology Table

This data-based integration strategy is particularly suitable if a typology was first formed from the qualitative data or if codes were transformed into document variables. A well-known historical example of such an approach can be found in the study “The Unemployed of Marienthal” (Jahoda, Lazarsfeld, & Zeisel, 2002). In this study, attitude types were formed on the basis of various qualitative data on the experience of unemployment. A current example of such an analysis can be found in Creswell and Plano Clark (2011, p. 292).

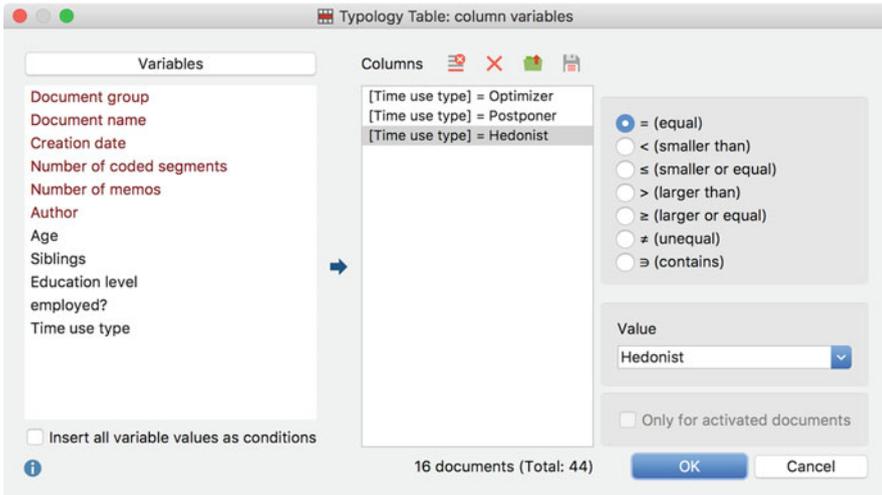
In a typology table, a connection is established between quantitative data in the sense of dependent variables (these form the rows of the table) and transformed codes or categorical variables. This function was given the name “Typology table” because of its ability to display several variables and their percentages or characteristic values (mean value and standard deviation) broken down for certain types (which are stored as the values of a categorical variable). Figure 13.6 shows the structure of the table with independent variables in the columns and the dependent variables in the rows.

In Fig. 13.6, three groups with different time use behavior (“time use types”) are compared in the columns, namely, “optimizers” (12 persons), “postponers,” and “hedonists” (16 persons each). The first line calculates the average age for the groups (44, 33, and 27 years), followed by the standard deviation in brackets. The following line “Siblings” contains the average number of siblings per type; the fourth line contains the percentage of employed persons in the respective group, all optimizers are employed, for example. The highest value of the line is highlighted in green for easier interpretation.

The rows consist of variables, either metric variables or selected values of categorical variables. The columns follow the pattern of the crosstabs; here you

	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%)

Fig. 13.6 Comparison of different types with regard to statistical values in the typology table



**Fig. 13.7** Dialog for determining the columns of a typology table

can select not only type affiliations but the values of any categorical variables. The function is started from the ribbon tab *Mixed Methods* > *Typology Table*; two dialogs appear in succession, in which the selection of the rows and columns is controlled. Figure 13.7 shows the selection process for the three columns of the table shown in Fig. 13.6.

The typology table is interactively linked to the data of MAXQDA: double-clicking on a result cell activates the documents with this categorical variable value, e.g., in Fig. 13.6 with a corresponding click on the nine professionals of the “hedonist” type. Double-clicking in the first column activates all documents with the selected variable value for a categorical variable.

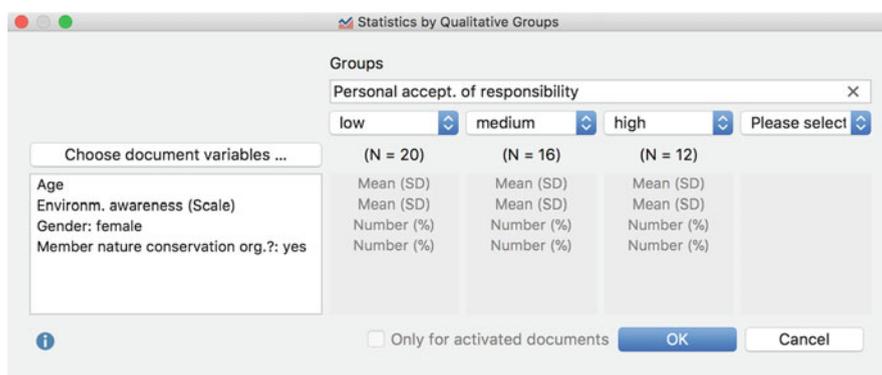
**Statistics for Qualitative Groups**

This joint display integrates qualitative groups (subcodes) with quantitative data: similar to the typology table, the groups are compared with regard to statistical characteristics such as mean value, standard deviation, or their relative proportions. Figure 13.8 shows the schematic structure of this joint display. For a metric variable, the cells will show the mean and the standard deviation, and for categorical variables, the cells will show its absolute and relative frequencies.

The documents for which the selected grouping code was assigned are evaluated in each column. It is therefore important to ensure that only a single subcode from this group of codes is assigned to each document to ensure that the documents belong uniquely to the groups. Assuming that an evaluative, scaling content analysis was carried out, a code “personal acceptance of responsibility” with the characteristics “low,” “medium,” and “high” as subcodes was formed, and corresponding segments were coded in each document. Then this coding can be used as a basis for forming the groups.

Coded with ...			
	Subcode A	Subcode B	Subcode C
Variable 1 (metric)	Mean (Standard Dev.)	Mean (Standard Dev.)	Mean (Standard Dev.)
Variable 2 (categorical)	Number (%)	Number (%)	Number (%)
Variable 3 (categorical or metric)	..	..	..
Documents	N (%)	N (%)	N (%)

**Fig. 13.8** Schematic structure of the display “statistics for qualitative groups”



**Fig. 13.9** Selection dialog for “Statistics for qualitative groups”

After starting *Statistics for QUAL groups* (in the *Mixed Methods* ribbon tab), the variables for the rows of the table are selected and then the grouping code and the desired subcodes for the columns of the table (Fig. 13.9).

The joint display “statistics for qualitative groups” can be used for parallel, explanative, and explorative mixed methods designs. In principle, the result of this display corresponds to the result of the typology table, but here the columns are formed by the presence of the subcodes instead of the values of a variable.

### Overview of Integration Strategies and Joint Displays

Table 13.1 gives an overview of the integration strategies described above. However, the spectrum of possible integration strategies is by no means exhausted with the joint displays shown, as there are many other possibilities for integration; for example, the article of Guetterman et al. (2015) contains further proposals, such as joint displays that make it possible to construct the questionnaire of a quantitative study from the results of a qualitative study. Many suggestions for mixed methods data analysis can also be found in the old and new editions of the extensive book by Miles, Huberman, and Saldaña (2013).

**Table 13.1** Integration strategies in MAXQDA

	Integration strategy	Description	Based on
1	Activation via document variables	Selection of qualitative data by using variable values	Data
2	Linking the results of QUAL and QUAN	The results of the qualitative and quantitative studies are linked using “hyperlinks” (“document links”)	Results
3	Side-by-side Display (Coded segments)	Comparison of the results of the qualitative and quantitative study (based on coded segments in a table)	Results
4	Side-by-side Display (Summaries)	Comparison of the results of the qualitative and quantitative studies (based on thematic summaries) in a table	Results
5	Quantitizing: data transformation QUAL→QUAN	Qualitative data is transformed into quantitative data, e.g., presence of a code or frequency of a code per case	Data
6	Qualitative exploration of extreme cases of the quantitative study	Based on the statistical analysis of quantitative data, extreme cases are identified, and their qualitative data is analyzed in detail	Data
7	Grouped thematic display	Statements on qualitative topics are presented in matrix form, broken down by variables from the quantitative study (e.g., sociodemographic characteristics)	Data
8	Statistics on qualitative topics broken down by quantitative groups: Crosstabulation	The frequencies of qualitative topics are compared, broken down by variables from the quantitative study (e.g., sociodemographic characteristics)	Data
9	Qualitative typology as grouping variable for quantitative data: Typology Table	Descriptive statistical analysis of quantitative data, broken down by the types formed in the qualitative study	Data
10	Statistics for qualitative groups	Descriptive statistical analysis of quantitative data, broken down for the subcodes of a code	Data

MAXQDA provides a set of tools that can also be used to design new forms of these strategies of integration, as is the case with strategy “qualitative exploration of extreme cases of quantitative study” described above. The basic functionality of MAXQDA is used here—in this case sorting the table of quantitative data while retaining direct access to the associated qualitative data. The *Mixed Methods* ribbon tab contains some frequently used joint displays with the necessary setting options. Table 13.2 gives an overview of these functions, explaining how qualitative and quantitative data are linked using these functions and what the results look like. This should help to make an informed choice when designing joint displays among the options MAXQDA offers.

**Table 13.2** Overview of joint displays in the ribbon tab “Mixed Methods”

	Columns	Rows	Results in the cells of the table	Maximum number of groups to be compared
Crosstab	Groups formed by variable values	Codes	Code frequencies per group, different calculation, and percentage variants	No limit
Typology table	Groups formed by variable values. Often, a typology was previously formed on the basis of the qualitative data, whereby the assignment to a type was saved as a variable value	Metric and categorical variables	For metric variables, mean values and standard deviations; for categorical variables, percentages of the selected variable value (type affiliation)	No limit
Statistics for QUAL Groups	Groups formed by the subcodes of a selected code	Metric and categorical variables	For metric variables, mean values and standard deviations; for categorical variables, frequencies and percentages of the selected variable value	4
Qualitative themes for quantitative groups (Coded segments)	Groups formed by variable values	Codes	List of coded segments of the selected codes for the documents of the respective group	4
Qualitative themes for quantitative groups (Summaries)	Groups formed by variable values	Codes	Thematic summaries of the selected codes for the documents of the respective group	4

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