Analyzing Focus Group Data

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Focus groups have become increasingly popular in recent years, as they can provide you with a variety of voices and opinions on a subject within a relatively short period of time and also offer the advantage of encouraging participants to communicate and discuss their views with each other. Both the group and the individual levels are of interest when analyzing focus group data. In fact, such analyses often require you to alternate between these two levels and to keep an eye on one while focusing on the other. Accordingly, MAXQDA provides functions especially adapted for the analysis of focus group data, which provide easy access to the focus group transcript as a whole and to the statements and contributions made by individual participants. Progress analyses of the overall discussion are also available, and you can just as easily trace the development of the stated opinions of individuals. Moreover, since these functions can equally be used for other types of text involving two or more speakers—such as forum discussions—this chapter is worth reading even if you are not specifically analyzing transcripts of focus groups.

In This Chapter
- Getting to know the features and characteristics of focus group interviews and how to analyze them
- Preparing and importing focus group transcripts
- Exploring and coding focus group transcripts
- Comparing individuals and groups of participants
- Notes on how to approach the process of answering typical questions

About Focus Groups and Group Discussions

Focus groups have a long history as modes of collecting data, going back to studies on the impact of mass communication in the 1940s and before (Morgan, 1997, pp. 4–5; Stewart & Shamdasani, 2015, p. 3). Since then, focus groups have been widely used in market research and more recently in many of the social sciences. With the increasing spread and development of the Internet, procedures for online data collection of group interviews have also been developed in which several people can express and exchange opinions on a given topic simultaneously, both verbally and in writing (Krueger & Casey, 2015, pp. 211–213; Liamputtong, 2011, pp. 149–155).

The terms used for focus groups in methods literature are just as diverse as the fields in which they can be applied. Sometimes they are referred to as "focused interviews," other times as "group discussions" or "group interviews." In some cases, there are different methods and methodologies based on distinct research traditions behind the term in question, some of which may influence how they are applied and how the data is collected and analyzed. In this chapter, we will concentrate on describing the functions for computer-assisted analysis of focus group interviews offered in MAXQDA and, for the sake of clarity, use primarily the terms that are used throughout the program, i.e., "focus group" and "participants."

Focus groups are usually conducted with about five to eight people and are led by one or sometimes two moderators who initially focus on a specific topic, often using a stimulus in the form of a film, an image, or a product presentation. The moderators ask questions based on structured, thematic guidelines and create a constructive atmosphere for discussion and interviews. The result of a focus group is at least one audio recording and, on some rare occasions, also a video recording, which may be partially or completely transcribed to varying degrees of accuracy, depending on the area of interest.

The complete spectrum of analysis methods for qualitative data can be used to analyze focus group data. The contents of the transcripts can be analyzed using techniques based on grounded theory method, thematic analysis, qualitative content analysis, or other analysis approaches. The more that attention is paid, not only to the topics and points of view mentioned during the focus group discussion, but also to the interactions of individual participants or overall group dynamics, the more important those analysis methods become that take into account the special characteristics of focus groups. Accordingly, textbooks that cover how to conduct focus groups, as well as journal articles and chapters in anthologies, will contain special advice for analyzing focus group data. Morgan and Hoffman (2018), for example, set out a coding scheme to code participants' interactions, and Onwuegbuzie, Dickinson, Leech, and Zoran (2009) have developed a "Qualitative Framework for Collecting and Analyzing Data in Focus Group Research," which contains proposals for tables depicting areas of consensus among participants as well as visual representations of response behavior.

MAXQDA supports both the analysis of focus group transcripts using standard analysis methods for qualitative interviews and special techniques developed for focus group analyses. The following is an introduction to the broad set of options for analyzing focus group data in MAXQDA, with a focus on the functions developed specifically for this form of data. At the end of this chapter, we will then address analysis questions that are independent of specific analysis techniques and describe how these questions can be answered effectively using MAXQDA.

Preparing and Importing Focus Group Transcripts

In MAXQDA, you have the option of importing a finished focus group transcript or creating one inside the project. As explained regarding texts generally in Chap. 3, focus group transcripts should be checked for spelling mistakes before you import them, anonymized if necessary, and prepared so that they are legible on screen, since this can save you a lot of work later on.

In order that MAXQDA can automatically code the contributions made to the discussion by each participant when you import the focus group transcript, these contributions must be prepared and identified according to two rules:

1. Each contribution begins with a new paragraph.
2. The name of the participant is written at the beginning of each contribution, followed by a colon. The names may not exceed 63 characters in length, but may contain spaces, so names such as "Mr. Anders" or "Ms. Berkempers" are possible. To make them easier to read, we recommend putting the names of the participants in bold type or emphasizing them in other ways. You need to be careful with colons in the transcript; if these are used within the first 63 characters of the beginning of a paragraph, MAXQDA interprets the preceding text as a name.

While it is helpful for most analyses in MAXQDA when contributions contain only one paragraph, it may be better for very long speech contributions to subdivide them into several paragraphs; the automated coding process will still easily recognize these as being part of the same contribution. If you want to import several focus group transcripts into MAXQDA, you should also assign identical names for the same participants across these transcripts so that you can later perform analyses for individual participants.

You can import prepared transcripts saved as Word, OpenOffice, or Rich Text files, just like other text documents. To start the import, go to **Import** > **Focus Group Transcripts** in the main ribbon menu. If transcripts contain timestamps, these are identified and removed once the corresponding audio or video file has been successfully assigned to it.

Figure 15.1 illustrates the view in MAXQDA once you have imported a focus group transcript. A new document has been created in the "Document System," and the file name "Democratic Candidates" has been adopted as its name. The
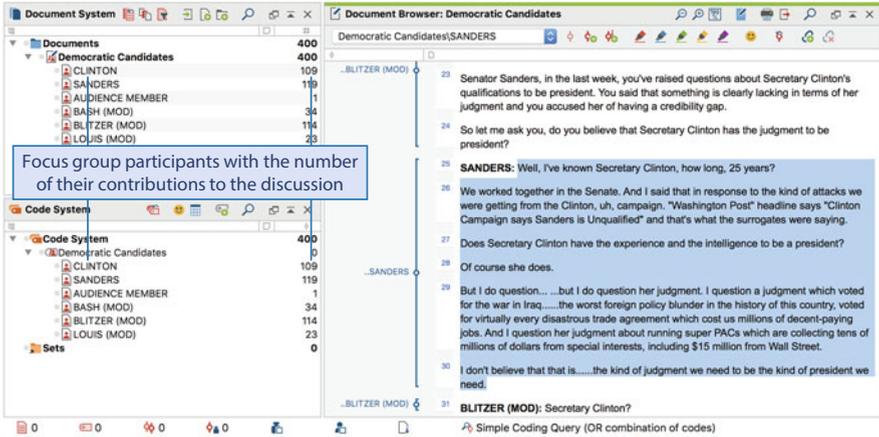
Fig. 15.1 Automatically coded contributions after importing a focus group transcript

document has its own icon, which indicates that this is a "focus group" document type. Below the document, the participants of the group discussion are listed individually, and these are permanently linked to the document. Like other documents in the "Document System," focus group documents can be moved and assigned to document groups and document sets. The participants are always moved with the document and can only be changed in order by clicking and dragging them with the mouse.

In the "Code System," a focus group code with the same name as the document is inserted at the top level, and the participants are defined as subcodes. The participants listed in the "Code System" and the "Document System" are permanently linked; if you change the order or names of the participants in one, the order and names in the other will change simultaneously. Focus group codes cannot be deleted; they are automatically removed when the associated document is deleted. If several focus group transcripts are imported, a document is inserted for each in the "Document System," and another top-level code is created in the "Code System."

As the coding stripes in the "Document Browser" in Fig. 15.1 illustrate, the contributions of participants are automatically assigned with the corresponding participant's code when the transcript is imported. The names of the speakers are not coded themselves to avoid artificially increasing the length of their contributions. The number behind a participant in the "Document System" and "Code System" indicates the number of contributions that participant made in the respective focus group discussion. This number will remain constant during the analysis, unless you delete the assignment of a participant's code after the import or add another—both are generally to be avoided.

▶   **Tip** After the import you should check the names of the participants in the "Document System" or "Code System" for typing errors. It would be annoying later if the same person appeared twice with different names, just because they were written differently. Please note that MAXQDA is case-sensitive. Since the participant codes cannot be deleted, if you detect any errors, you must delete the transcript, and then import it again, which is easily done as long as you have not assigned any further codes to the transcript in the meantime.

Immediately after the import, it is a good idea to write down information about the respective focus group in a document memo, for example, the basic conditions of the data collection procedure and any distinctive features of the process. Document memos are therefore an ideal place to store the moderators' minutes and a postscript, unless they have already been imported into the project file as separate documents. Memos can also be written for individual participants, but standardized information such as their age and occupation are better recorded as variable values in the Overview of Focus Group Participants (see below).

Transcribe Focus Group Discussion in MAXQDA
If you would like to transcribe an audio or video recording of a focus group in MAXQDA, first import the recording as a new document, and then proceed as described in Chap. 4 "Transcribing Audio and Video Recordings." The rules we mention above regarding the preparation of focus group transcripts for automatic coding should also be observed for these. When the transcription is complete, keep the transcript open, and go to ***Import > Convert Text > Insert Displayed Text as a Focus Group Transcript***. MAXQDA then creates a copy of this text, processes it in the same way as when importing a ready-made focus group transcript, and automatically codes the discussion contributions with the names of each participant. Existing code assignments, memos, and timestamps are retained during this process. You can then delete the original document with the transcription.

Exploring Focus Group Transcripts

Once you have imported all the focus group data you want to analyze, you may want to conduct an explorative analysis of the focus group texts, for which the procedures and functions described in Chap. 5 are available. You can record all your findings and any hypotheses that arise during this exploration and subsequent analysis in memos (even for individual participants) or in the logbook, so that you can retrieve these at a later point in time. You can color-code interesting text passages with the available highlighters during your first reading; you can search for interesting words or use a word cloud to gain an interactive overview of frequently used terms. MAXDictio can also be used for keyword-in-context (KWIC) analyses.

In addition to these familiar explorative tools, the visual tools described in Chap. 12 can also be used to examine focus group transcripts, and MAXQDA provides several analysis tools specifically tailored to focus groups. The basis of these tools is that while focus group transcripts in the "Document System" can be selected for analysis just like normal text documents, MAXQDA also gives you access to the contributions of individual, several, or all participants within these transcripts and thus allows for a simple differentiation at the participant level.

Gain an Overview of the Participants in a Focus Group

The first exploration tool presented here is the Overview of Focus Group Participants, which provides important information about individual participants, such as the number and extent of their contributions to the discussion, and enables the storage of standardized data in the form of variables. You can open this overview from all levels in the "Document System" (with the exception of the Sets level), including for individual participants, for all the participants within a focus group, and for all the focus group documents in your project. To open this overview, right-click on the relevant level in the "Document System," and select *Focus Group Participants* in the *Overviews* section of the context menu.

The number of contributions corresponds to the number of code assignments per participant in the "Code System," and the displayed percentage allows you to easily compare these. When interpreting these results, you should consider whether many very short contributions were coded for a person—for example, if they interjected frequently—and a lot of very short paragraphs were coded as a result. Information about the comparative extent of participants' contributions, in the number of characters, as can be seen in the last two columns, can help you to accurately evaluate participants' contributions. For example, Fig. 15.2 shows that Clinton spoke 45% of everything that was said during the discussion, while she only made 27% of all the contributions, counted individually. Special consideration must also be given to comments and notes included in a transcript that are not actually part of the participant's contributions, such as "[applause]" or "(unintelligible)," but were automatically coded as if they were speech when importing the transcript. These are counted in the analysis of the characters but should have no major influence on the percentages if they have been used sparingly. If you want to display the distribution of the number and extent of speech contributions in a graphic, you can click on the

Participant	Focus group	Contributions	% Contributions	Characters	% Characters	Age
SANDERS	Democratic Candidates	122	30.05	35,874	36.71	74
CLINTON	Democratic Candidates	112	27.59	43,951	44.98	68
BASH (MOD)	Democratic Candidates	34	8.37	4,505	4.61	0
LOUIS (MOD)	Democratic Candidates	23	5.67	3,401	3.48	0
BLITZER (MOD)	Democratic Candidates	114	28.08	9,974	10.21	0
AUDIENCE MEMBER	Democratic Candidates	1	0.25	15	0.02	0

Fig. 15.2 Overview of Focus Group Participants for a focus group

Statistics icon in the Overview of Focus Group Participants toolbar to open MAXQDA's statistics and chart functions, with which you can create and export horizontal and vertical bar charts and pie charts.

By default, all the participants at the selected level are listed in this overview. To restrict the display to selected participants or to exclude the moderators from the table, activate the participants in the "Document System" that you want displayed, and then click on the *Only activated focus group participants* icon at the far left in the overview toolbar. The percentages are then automatically recalculated. If you use the filter functions available in the context menu for each column header, rows are only hidden, that is, the percentages are not recalculated.

This overview operates in the same way as all overviews in MAXQDA, allowing you to search through, sort, and export it. It also lets you define variables in which standardized information can be stored for each participant. To do this, switch to the variables view (by clicking on the *List of variables* icon within the overview window), create your new variables, and enter the corresponding values for the participants. Alternatively, you can import this data from an Excel table in the same way as with document variables. In Fig. 15.2, an integer-type "Age" variable has been created to record the age of the individual focus group participants, which can then be used to select and compare the participants in a later analysis. The moderators were assigned the age "0," which was defined as a missing value, so that they could easily be disregarded.

Document Portrait: Graphical Representations of Focus Group Contributions
A tool for visually exploring focus group data is the Document Portrait, which can be used to visualize participants' contributions and, in the case of short focus group discussions, their progression. In order to achieve a meaningful visual representation, however, it is necessary to first assign different colors to the individual participants. You can do this by right-clicking on a participant (in either the "Document System" or the "Code System") and selecting a color from the context menu. The Document Portrait can be via the context menu when you right-click on the focus group document. If necessary, you can activate only those participants in the "Code System" that you want to include in the visualization.

To compare the spoken contributions of individual participants, you need to select *Ordered by color frequency* in the toolbar. In this display mode, the image is similar to a bar chart (Fig. 15.3).

Codeline: Visualizing the Progression of a Focus Group Discussion
The Codeline is ideal for visualizing the flow of a focus group discussion. When exploring these discussions, the first step is to examine only the progression and patterns of the spoken contributions. Later, once text passages have also been coded with thematic codes or codes for group interactions, these levels can also be included in the Codeline for more in-depth analyses. To create a Codeline for a focus group, first activate the participants' codes in the "Code System"; otherwise all codes, including participants from other focus groups, will be visible in the first column. Figure 15.4 depicts a Codeline, compressed to window width, for a television
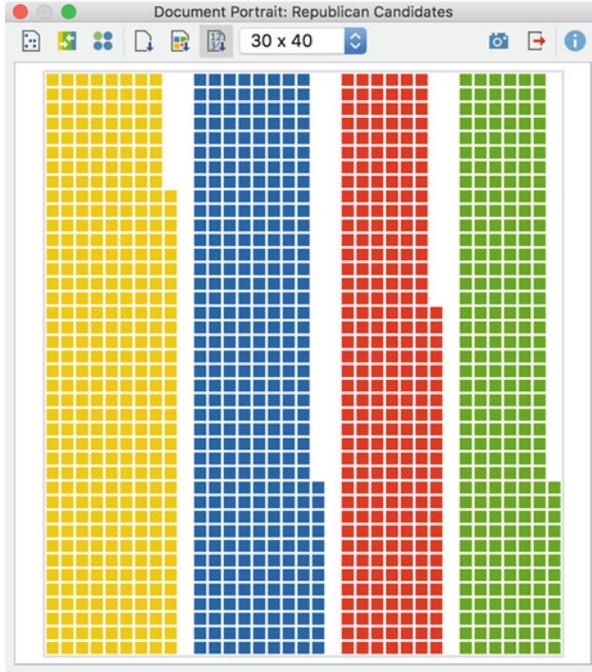
Fig. 15.3 Document Portrait (ordered by color frequency) for a focus group (yellow, Trump; blue, Rubio; red, Cruz; green, Kasich)
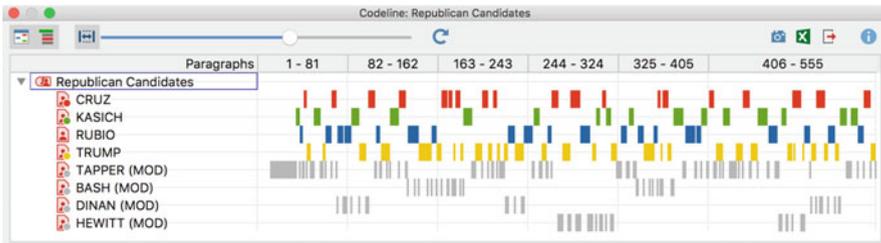

Fig. 15.4 Visualizing the progression of a discussion in a Codeline

discussion with four presidential candidates in the USA. The individual participants are listed in the rows and the successive sections of the discussion in the columns, such that its progression is clearly visible in the Codeline. Apart from the expected short contributions of the moderators, you can see here that the breaks between the contributions made by Cruz, Kasich, and Rubio tend to be longer than the breaks between contributions from Trump, who speaks more frequently and makes multiple short statements. When you double-click on a colored section, the corresponding text passage is displayed in the "Document Browser," where you can check and refine any potential hypotheses by reviewing the original text.

Word Clouds: Identify Frequently Used Words of Selected Participants

As described in Chap. 5, word clouds also provide explorative access to the contents of texts and can be used for one or more focus groups. For an individual focus group document, a word cloud can be opened via the document's context menu in the "Document System." In the list of word frequencies that opens, you can fill the stop list with words that are not relevant to your analysis, thus displaying only relevant words in the resulting cloud.

If you only want to analyze the contributions of selected participants, you need to activate the corresponding focus group documents in the "Document System" first. Then, activate the relevant participants in the "Code System." MAXQDA will then display these participants' contributions in the "Retrieved Segments" window. Here you can also click on the icon in the header of this window to open a word cloud based on the displayed text segments.

Lexical Searches in Focus Group Contributions

MAXQDA's specialized features for the analysis of focus group data allow you to search for words and strings within the contributions of selected participants. For example, if you have identified certain words of interest with the help of a word cloud and want to see them in context, you first need to activate all the desired participants in the "Document System" and then go to *Analysis > Lexical Search*. In the dialog box that opens, you can restrict your search by selecting the *Only in activated documents/activated focus group contributions* option.

Coding Focus Group Transcripts

Once you have completed the explorative stage of the analysis process, you will typically progress to examining the focus group transcript more closely and begin coding it, for which all of MAXQDA's coding functions described in Chap. 6 are at your disposal. Due to the special characteristics of focus groups (moderated discussion with several participants; focus on a given topic or theme; group interaction), different analysis levels can be defined for the discussion, which should be reflected in different sections in the "Code System":

- A topic level
- A participant level
- A group interaction level
- A moderator level

At the group interaction level, for example, we can refer to the coding system developed by Morgan and Hoffman (2018), which is shown in Fig. 15.5. An evaluative, scaling qualitative content analysis (Kuckartz, 2014; Mayring, 2014) will add evaluative codes to measure, for example, the degree of endorsement of a new product or service. If you are conducting a study on the method and
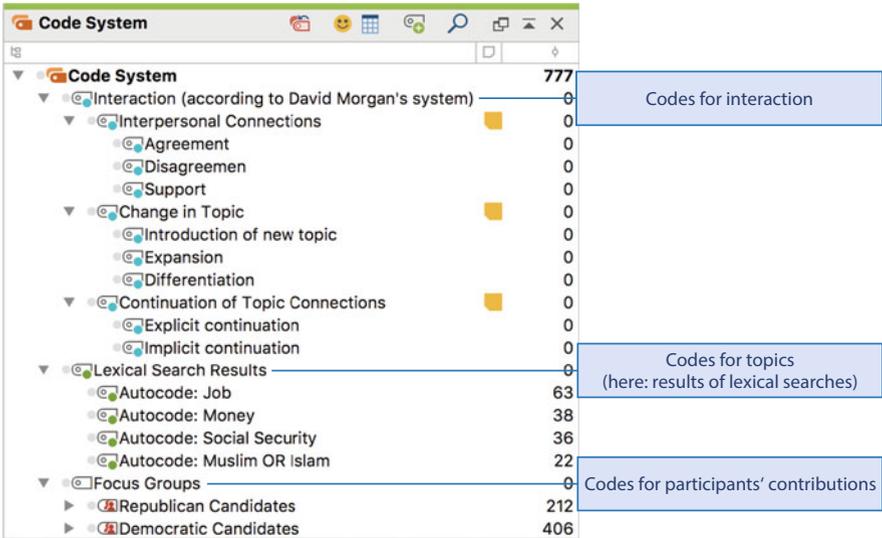
Code System		
▼ Code System	777	
▼ Interaction (according to David Morgan's system)	0	Codes for interaction
▼ Interpersonal Connections	0	
Agreement	0	
Disagreemen	0	
Support	0	
▼ Change in Topic	0	
Introduction of new topic	0	
Expansion	0	
Differentiation	0	
▼ Continuation of Topic Connections	0	
Explicit continuation	0	
Implicit continuation	0	
▼ Lexical Search Results	0	Codes for topics (here: results of lexical searches)
Autocode: Job	63	
Autocode: Money	38	
Autocode: Social Security	36	
Autocode: Muslim OR Islam	22	
▼ Focus Groups	0	Codes for participants' contributions
▶ Republican Candidates	212	
▶ Democratic Candidates	406	

Fig. 15.5 Different code levels in the "Code System"

methodology of focus groups, additional code areas will also be required in the "Code System."

For the sake of clarity, we recommend defining separate parent codes in the "Code System" for all of these levels, so that, as in Fig. 15.5, topic and interaction codes are clearly separated from each other. Subcategories can be defined for all of them. MAXQDA's analysis tools then allow you to make connections between these various levels and to compare them once you have finished coding the data, e.g., by displaying them together in the Codeline or by compiling coded segments according to selected criteria, as we will describe in the next section. Since the focus group codes can be moved and rearranged like normal codes in the "Code System," it is also helpful to combine these under a higher-level code too, so that these can be collapsed at any time (Fig. 15.5).

Retrieving Coded Segments from Focus Group Transcripts

Once the data has been explored and coded based on your research questions, these coded text passages can be systematically compiled for further analysis in the "Retrieved Segments" window. For this, MAXQDA's activation functions can be used to select the relevant focus group transcripts and contributions of individual participants in the "Document System" and then combine them with activated codes in the "Code System." For each question you want to answer, you will need to use a different activation logic:

What Did a Specific Participant Say in One or More Focus Group Discussions?
To compile everything one participant said, activate all of the focus groups in which they were a participant in the "Document System," and additionally activate their codes in the focus groups listed in the "Code System." All the contributions made by this participant will then be displayed in the "Retrieved Segments" window. As soon as you select another participant in the "Code System" by activating them, their contributions will also be displayed here. The status bar will, as usual, inform you about the number of coded segments found—in this case the number of contributions.

   If you are only interested in what one participant said within one focus group, you can right-click on their name in the "Document System" or "Code System" at any time and open the *Overview of Contributions* entry from the context menu. MAXQDA then opens a window containing that specific participant's contributions in a table overview, which you can operate in exactly the same way as the Overview of Coded Segments and allows you to browse through the details, including a preview, of what they said.

What Did One or More Participants Say About a Specific Topic?
If you want to restrict your search for contributions to a specific topic, you need a different activation logic. Instead of including the entire focus group document in the analysis, activate only the relevant participant (or several, if required) in the "Document System," and additionally activate the relevant topics in the "Code System." The contributions pertaining to the selected topics, made by the selected participants, will then appear in the "Retrieved Segments" window. To assist you in matching these contributions to the speakers, the source information in this window contains the name of the respective focus group and respective participant (Fig. 15.6). This information is also included when exporting these results as a table overview.

   The *Analysis > Complex Coding Query* function also allows you to perform more complex searches and compile coded segments where, for example, several codes or only specific codes have been assigned. To limit the analysis to the currently activated participants, make sure that you have selected the *Only in activated focus group contributions* option in the dialog box.

What Did Participants with a Shared Characteristic Say About a Topic?
Just as the function *Mixed Methods > Activate by Document Variables* allows you to select individual documents for analysis based on variable values, you can also activate individual participants in focus groups based on their variable values. To do this, first open the function *Activate Focus Group Participants by Variable* from the

Fig. 15.6 Participant's name displayed in the source information in the "Retrieved Segments"

context menu at the top level in the "Document System." Then, as described in Chap. 13 on MAXQDA's mixed methods functions, set a condition in the middle area of the dialog box which the participants you want to activate must fulfill, such as "Age > 45" or "Occupational group = Nursing staff." MAXQDA will then activate all participants in all focus groups to which the entered condition applies. If you want to restrict the selection to one focus group, you can specify its name as an additional condition. By default, MAXQDA automatically offers you the variables "Focus group," "Contributions," and "Characters" as conditions for activating participants based on their variable values. With the last two, you can easily activate only those participants who contributed more or less than the average for the whole focus group.

Comparing Participants and Groups of Participants

Further questions typical to focus group analyses concern the comparison of individual participants and groups of participants. As already mentioned above, the Codeline can be used for this purpose—once the data has been coded—to visually examine the progression of discussion topics covered by one or more participants. Additionally, MAXQDA's Code Matrix Browser, Interactive Quote Matrix, and Crosstab functions offer further ways to compare the contents and frequencies in your focus group data on an individual or group-based level.

Visualize Code Assignments per Participant with the Code Matrix Browser
To answer the question of who spoke about which topics and how often, we recommend making use of the Code Matrix Browser to visually compare focus group participants. Before you open this function, as usual via the *Visual Tools* ribbon tab, you first have to activate the relevant participants in the "Document System" and the appropriate topics in the "Code System." In the Code Matrix Browser options dialog box, select *Focus group participants* as your columns, and make sure that you select *Only for activated focus group participants* and *Only for activated codes*. Consider the example in Fig. 15.7: after exploring several topics in a presidential debate between four candidates using the lexical search and then automatically coding the search hits along with their surrounding paragraphs, a
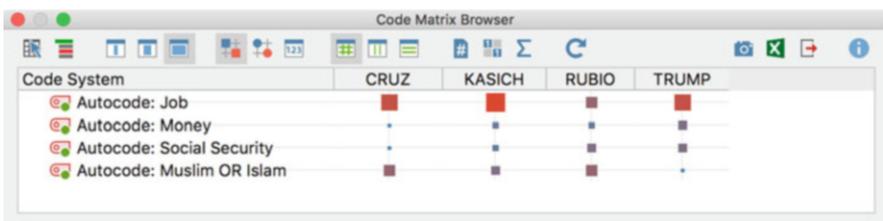

Fig. 15.7 Participants (columns) × Topics (rows) in the Code Matrix Browser

Participant $\times$ Topic matrix was created using the Code Matrix Browser. It shows the distribution of topic codes across the four candidates.

The larger the square on a node, the more frequently the respective topic code has been assigned to that candidate. So, in this example you can see that, for Kasich, the largest number of his contributions was coded with the topic "Job." Of course, the results of automatic coding processes and the resulting code frequencies should be interpreted with a certain degree of caution. First, it helps to switch the display in the Code Matrix Browser to a numerical format to see how pronounced the differences between the code frequencies that resulted in squares of varying sizes are. Second, we also recommend that you look at the codes behind the numbers in their original context. Double-clicking on one of the squares lists the corresponding segments in the "Retrieved Segments" window, where you can examine them in detail. For smaller tables with a maximum of four to six columns, the results can also be displayed as an Interactive Quote Matrix, which you can open via the first icon at the far left of the Code Matrix Browser toolbar. This provides a condensed comparison of the coded segments behind the displayed squares by listing these in a table format. Optionally, the source information, code comments, and memos attached to the segments can also be displayed.

By default, the Code Matrix Browser is configured to display the largest square for the cell(s) with the most code assignments and the smallest square for the cell(s) with the least code assignments. You can switch between row or column calculations to determine the square size depending on whether you want to compare the distribution of coding frequencies per topic or for each individual participant. If you switched to a row calculation in Fig. 15.7, that is, per topic instead of per person, you would be able to see which presidential candidate had the most contributions coded for each topic and which had the least.

Compare Groups of Participants with the Crosstab
The Crosstab function allows groups of participants from one or more focus groups to be combined on the basis of their previously assigned variable values and compared in terms of their code frequencies per topic. You could think of the display as follows: the columns of the Code Matrix Browser are grouped together, and the sums of the frequencies per group are calculated.

If you want to limit the group comparison to certain focus groups, you should activate the corresponding participants in the "Document System" before opening this function. The fastest way to do this is in the context menu of a focus group transcript with the entry *Activate all participants*. In any case, you should also activate just the codes in the "Code System" for which you want to conduct the comparison, because otherwise the Crosstab will take irrelevant data into account when calculating the percentages.

Once you have activated the relevant participants and codes, you can open this function via *Mixed Methods* > *Crosstab* > *Crosstab for Focus Groups*. In the dialog box that appears, select the variables, and set the conditions for your comparisons in the *middle* area, e.g., "Age < 50" and "Age $\geq$ 50," to compare under-50s with those who are 50 years or older. The Crosstab will then contain a

Fig. 15.8 Crosstab for comparing two groups of participants

separate column for each defined condition, in which only those participants are considered who fulfill the respective condition. To be able to compare several groups, you must enter at least two conditions. Since MAXQDA does not check whether a person fulfills several of the defined conditions, and thus could be assigned to several groups, you should check these conditions carefully. Moreover, you should make sure that the options *Only for activated focus group participants* and *Only for activated codes* are selected in the dialog box, which will be suggested by default if you have activated the relevant participants and codes before opening this function.

Figure 15.8 depicts a Crosstab that divides the members of several focus groups into two groups according to their age. Column percentages have been chosen as the cell display setting, so that the distribution of the discussed topics within these two groups can be compared. While the topic "Climate" takes the lead for both groups, there are clear differences regarding the topic "Resources": only 18.7% of the contributions of the under-50s refer to this topic, while in the older group, it occurs in 27.0% of their contributions.

Answering Typical Analysis Questions

The literature on focus groups often mentions lists of questions that are typically addressed when analyzing focus group data. These questions result from the features of focus groups already mentioned above and may be seen as complementary to the specific research questions at the center of a study, insofar as they have not already been incorporated into the development of the study. Here, we will discuss some of the analysis perspectives of Krueger and Casey (2015, p. 147), Stewart and Shamdasani (2015, pp. 120–123), and Liamputtong (2011, pp. 173–178), which are peculiar to focus groups, and conclude with an overview of how their associated questions can be meaningfully analyzed with the aid of MAXQDA.

Frequency and Extent: How Often or Rarely Was a Concept or Topic Mentioned? How Many Different Participants Mentioned a Given Topic or Point of View? How Extensively Was a Topic or Point of View Discussed?

Once you have coded the relevant topics, concepts, and viewpoints in your focus group transcripts, the best way to determine their frequencies is to use the Code Matrix Browser, including the sums available per participant/per focus group and per topic. It is possible to include the entire focus groups as well as individual or all participants in the visualization by activating them in the "Document System." Dictionary-based word counts using MAXDictio also make it possible to perform frequency analyses for larger data sets and compare the results for individual participants, groups of participants, or entire focus groups.

The visual representation of topics in the Codeline can be used to assess the extent to which certain topics and views are discussed, as it allows you to see the relative time period over which individual topics are discussed or mentioned. More analytically valuable, however, because it provides precise figures, is the function ***Analysis > Code Coverage > Texts, Tables and PDFs***, which you can use for activated focus group documents and activated topic codes. The results table provides information on the extent to which the individual topics are discussed, and in which focus groups, based on the number of characters coded.

Stewart and Shamdasani (2015, p. 121) point out that it may also be important to investigate what the participants did *not* say. This could include relatively mundane, self-evident matters but also issues that are difficult to address in the context of a group discussion, such as topics concerning a person's own body. The analysis of the unsaid can be carried out in MAXQDA with the help of a deductive code system, designed on the basis of previous knowledge: topics and viewpoints not coded in focus group data were obviously not discussed by the respective group. Alternatively, you can perform searches for words of interest to find out for which ones there are no hits.

Sequence: In What Order Were Topics and Points of View Mentioned? What Was Said First?

For the analysis of temporal aspects, the Codeline is usually quite useful, as you can see which topics and points of view are "top-of-mind" (Stewart & Shamdasani, 2015, p. 120) and are mentioned first in response to open questions. Of course, in order to assess the relative importance of topics, one should consider more than merely the order in which they are mentioned. Each respective response's relevance vis-à-vis the research question, its content, and also the intensity with which the response is presented should all be included in this analysis.

Intensity and Specificity: With What Level of Fervor and Emotional Content Were Statements Made? What Level of Detail Did Participants Provide in Their Contributions?

If these aspects of your analysis are to be given a high priority, it makes sense to create a separate "intensity" and "specificity" top-level code with ordinal values in the "Code System"—as you would for an evaluative, scaling qualitative content

analysis—in order to be able to make a scaled assessment of individual statements. Various MAXQDA functions then allow you to analyze the co-occurrence of intensity codes and topic codes. In the Code Relations Browser, or with the help of function *Analysis > Code Configurations > Complex Code Configurations*, you can examine the frequencies of the co-occurrences (see Chap. 12), and in the Codeline, you can also view them in terms of their chronological order.

Alternatively, you can use the weight function, with which you can assign an intensity value of 0–100 to each code assignment and later include or exclude certain coded segments with the help of the weight filter. In the context of a less formal approach, simply surmising the intensity of a statement on a subject when compiled along with other text passages in the "Retrieved Segments" window, and including this information in your analysis report, may prove sufficient.

Reasoning: How Did Participants Justify Their Views and Assessments?

It can also be helpful to create your own codes for reasons and justifications in the "Code System" and to code relevant statements as such. However, an analysis of the co-occurrence of these codes can be problematic, because opinions and their justifications need not necessarily be in the same places in the transcript. It may therefore be more effective to work with document links, memos, and coding commentaries to establish the connections between stated views and their justifications.

Consistency: To What Extent Did the Individual Participants Stick to Their Opinions?

The compilation of an individual's contributions on a topic in the "Retrieved Segments" window is particularly well suited to answering this question. The quickest way to put them together for different participants is to open the Code Matrix Browser, display the participants in the columns, and then double-click on the relevant nodes to display a particular participant's contributions for any one topic in the "Retrieved Segments" window. With the help of links and memos, contradictory statements and amended opinions can be highlighted in the text itself.

Group Dynamics: How Are Topics, Participants, and Interactions Interrelated?

Liamputtong (2011, p. 176) lists a very helpful set of questions by Stevens (1996, p. 172), which divides group interactions into three primary areas, each containing related questions:

- What? (e.g., "Which statements provoked conflict?")
- Who? (e.g., "Were individual participants excluded?")
- How? (e.g., "How did participants react to the ideas of others?")

Many of these questions can easily be translated into categories within a separate code area in the "Code System," such as "conflicts," "agreement," or "dealing with emotions," and then analyzed as described above. However, several of the questions

can be analyzed more effectively using other techniques. "Were alliances formed among the participants?" and "Whose interests were more strongly represented in the group than others?" are questions that require a holistic analysis of the entire conversation and are ideally based on exploration results and case summaries, where initial thoughts and hypotheses relating to such questions have been compiled in memos on or within the focus group document.

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