

Module 8

Part B

Working with Words

PART B: WORKING WITH WORDS

Learning Task 1: Five stages

‘**Data**’ basically means ‘information’. ‘**Data analysis**’ means making sense of the information that we have collected. Whether we are dealing with numbers or words, there are five stages of data analysis. These are:

a) Preparation: _____

b) Initial exploration: _____

c) Analysis: _____

d) Representation and display: _____

e) Validation: _____

Talk with one or two others about what you think each of these stages is about. Be prepared to offer your ideas to the whole group. We’ll talk about each in more detail later.

Learning Task 2: Introductory reading

In Module 5 we looked at various ways of collecting information. ‘Qualitative data’ are the descriptions and stories we usually collect in interviews and focus groups. We also get them from open-ended questions in questionnaires.

When researchers do qualitative research, they write ‘**field notes**’ at the same time or straight afterward. Field notes contain information that does not appear in the data. They might include the researchers’ observations or feelings about what happened. They may also note down things that were said after an interview was completed.

Imagine just how much data we get when we do qualitative research!

How do we organise and make sense of all the data? As with quantitative data, researchers try to find categories and patterns in the data. They also often look for relationships and themes among the categories.

Learning Task 3: Data preparation

3.1.

Reading: read individually, or a volunteer can read aloud.

When we conduct interviews, we often audiotape them. The recording of the interview must then be **transcribed** (written down) so that it can be analysed by the researchers. To transcribe something, we listen to the tape and type the interview into a computer at the same time. Once the interview is transcribed, the data is analysed either by hand or by using computer software. Researchers then look for patterns and themes in the data.

3.2. Transcribing can be difficult.

- a) Listen to a song that you don’t know very well. While listening, individually transcribe (write down) the words of the song.

- b) How did you go? Were you able to write down all the words of the song the first time? _____
- c) Did you feel that you wanted to replay the song again so you could try to write all the words correctly? _____

Researchers who are transcribing long interviews use special machines that allow them to slow down the speech or replay the interviews as often as they need.

Learning Task 4: Initial exploration of the data

Reading: read individually, or a volunteer can read aloud.

After the data have been transcribed (prepared), our next task is to become thoroughly familiar with the data.

This involves **reading and re-reading the text and field notes**. While reading the text, it is also important for us to:

- a) Look for obvious themes.
- b) Raise questions about the data.
- c) Take good notes so as not to forget.
- d) Think about whether any events or circumstances might have influenced what was said in the interview or the focus groups.

BREAK 20 MINUTES**Learning Task 5: Analysis of the data**

Reading: read individually, or a volunteer can read aloud.

There are four ways to analyse and interpret qualitative data. However, the four do not necessarily follow on from each other. The process is 'iterative'. This means that as the researchers get new data, questions will come up, and themes emerge. They might choose to go back to various steps or try something different. Researchers may decide they do not like what they did at a previous stage. They may even take it apart and start all over again. Generally, researchers work as teams in this process.

The first process for analysing qualitative data involves grouping the data together and labelling it in meaningful ways. This process is called '**coding**'.

5.1. Steps in qualitative analysis: Coding

Now we will look at an example of coding. Read the material that the Trainer gives you, and pay attention to the codes written on it.

- a) With one or two others, discuss the coding. Can you see how the researcher developed these codes? _____

5.2. Processes in qualitative analysis: Grouping the codes into categories

Reading: read individually, or a volunteer can read aloud.

This process involves grouping the codes into categories. The categories act as an ‘umbrella’ under which various different codes can be grouped. For example hobbies such as playing tennis, cricket, baseball or rugby could be grouped under the code ‘sports’. All varieties of food such as apples, pears oranges etc, could be grouped under the code ‘fruit’.

Using the data that the Trainer gave us, we will work with one or two other people to group some codes together.

- a) What will we call our new category? _____

5.3. Processes in qualitative analysis: Identifying themes and relationships among the codes and categories.

Reading: read individually, or a volunteer can read aloud.

When we analyse qualitative data we continue to combine and name categories until we can't see any more logical combinations. The groupings that are left are often called ‘themes’. Researchers name the themes to reflect all the categories together within them.

5.4. Processes in qualitative analysis: Develop concepts and make generalised statements.

Reading: read individually, or a volunteer can read aloud.

For this step we must decide on some conclusions based on the themes that we found in the data. This step involves researchers asking themselves:

“If these themes are true, then what can I conclude?”

Learning Task 6: Representation and display of the data

Reading: read individually, or a volunteer can read aloud.

Qualitative data are represented in the following ways:

- a) By describing in words, the interpretation of findings.
- b) By using quotes and pictures to illustrate points.
- c) By using visual models, diagrams, figures and tables.

Learning Task 7: Validation of the data

7.1.

Reading: read individually, or a volunteer can read aloud.

It is important that we have as much evidence as possible that shows our conclusions are valid (true). There are many ways to validate conclusions. Next we will look at three common ones:

- a) Triangulation.
- b) Member checking.
- c) Looking for alternative explanations.

7.2. Triangulation

Reading: read individually, or a volunteer can read aloud.

Imagine a triangle. It has three different points and three different lines that join to make the triangle's single, solid shape. In the same way, '**Triangulation**' involves finding several different types of sources to support our conclusions. For example, recall the research on oranges. Say we want to triangulate our research methods so we can see if they each lead to similar conclusions. We could choose to interview shoppers or we could ask them to complete questionnaires as well as observing how people shop at the fruit shop.

Triangulation also involves asking different researchers to code the same data to see if they come up with similar categories and codes. Overall, the aim of triangulation is to get a better understanding of the topic from various points of view.

7.3. Member checking

Reading: read individually, or a volunteer can read aloud.

Member checking involves us returning to talk to the research participants. We can show the participants the data and findings to allow them to check on the accuracy of the data. The participants can then help us by confirming our understanding or interpretation of their views and experiences.

7.4. Looking for alternative explanations for our findings

Alternative explanations for our findings need to be explored to enhance their credibility. This means looking actively for other theories that might also explain what we have observed or found. This way we can see how our conclusion stands up when compared with other explanations.

SUMMARY:

In this Module we have worked with the five stages of data analysis for qualitative data. These stages include:

- ◆ Data preparation.
- ◆ Initial exploration of the data.
- ◆ Analysis of the data.
- ◆ Validation of the data.
- ◆ Representation and display of the data.

We can each go back to any of these stages at any time to refresh our memories.

REFERENCES AND FURTHER READING:

If your team feels they need to further develop their specific skills in this method of data analysis there are many texts that you might select. The references below were used to develop Module 8 and we recommend reading them:

Denscombe, M. (2007). *The Good Research Guide for small-scale social research projects*. 3rd edition. Berkshire, England: McGraw Hill Open University Press.

Miles, J. and Banyard, P. (2007). *Understanding and Using Statistics in Psychology: A Practical Introduction*. London: Sage Publications.

Polgar, S., Thomas, S.A. (2008). Introduction to Research in the Health Sciences. 5th edition. Edinburgh; London; New York; Oxford; Philadelphia; St Louis; Sydney; Toronto: Churchill Livingstone Elsevier.