

### What are the uses of CAQDAS?

All the available computer assisted qualitative data analysis software packages [CAQDAS] can only **assist** in analysis: they will NOT **do** the analysis. They are only tools (often very useful ones) and not solutions to the main challenges of analysis. This means, using a CAQDAS package is no substitute for understanding the relevant literature, knowing why you carried out the research, reading the transcripts closely and several times, and thinking creatively about what they mean and their possible contribution to helping to answer the research questions!

### 1. To explore the data

**Text search** tools offer ways to search for one word or phrase, or even a collection of words around the same topic area. Such searches usually provide good access to those parts of the documents where those keywords appear – allowing a fairly instant retrieval of topic related material – sometimes abbreviated as KWIC (Key Words in Context).

#### 2. To Code and Retrieve material

We choose key-words and/or conceptual categories (codes) that can be applied to selections of (overlapping, embedded) text and as many codes as required can be applied to the same text selection. We (collectively) have complete freedom concerning the structure of the coding schema and the coding strategies employed – e.g. whether inductive, deductive or a combination of both. In general terms code generation is both easy and flexible and the researcher is free to use a combination of strategies if desired and to refine coding if necessary. Usually, the responsibility for thinking about each coding action rests entirely on the user. But if there are several users in a team, someone must ensure that the codes are standardised and easily up-dated to include coding done by others in the team.

#### 3. To help in Project Management and Data Organisation

All CAQDAS packages offer powerful means by which to manage the research project as a whole and to organise data according to known 'facts', descriptive features and data types. Any files which can be converted into the format(s) supported by the given software constitute data as far as the software is concerned. The project management elements mean that a CAQDAS package is not simply a tool to facilitate the analytic stage of the research process. For example, much work can be done before data are entered into the software. We can use a CAQDAS program for theory-building, to reflect and significantly help with the 'cyclical' process which is characteristic of many qualitative research and analysis projects. Data organisation enables us to focus on (combinations of) sub-sets of data, thereby facilitating comparison. Even when used in the most basic way, therefore, a CAQDAS program can significantly increase access to the different elements of a project and to subsets of data held within it.



### 4. To search and interrogate the database

At any stage of the process a CAQDAS program offers the option of searching the content of the raw data. For instance, if you want to find how many times different respondents use the word 'I' you can ask the program to display counts for each document. Most programs will also show you the context of when the word or phrase has been used and you can decide how much context you want to see (e.g. a set number of characters on either side of the word or phrase, whole sentences, paragraphs, or the whole document). You can also later search for relationships between words (or numbers) in the raw data and the codes that have been applied to data (for example, do people use the word 'I' when talking about their emotions, but not when they are describing their life histories?) Such searches might be carried out at a secondary level of analytic coding.

## 5. To provide some writing tools

The process of qualitative data analysis is rarely linear and the various writing tools (for example memos, commenting, annotating etc.) offered by a CAQDAS program provide ways to increase the researcher's contact with his/her thoughts and processes – provided, of course, they are used in a systematic way.

# 6. To help with output

- **a. Textual output.** Most CAQDAS programs have fairly standard selections of reports (output) which allow the user to view the material in hard copy or to integrate it into other applications, e.g. Word, Excel, SPSS. Those standard reports include coded segments either from one code or a selection of codes. Good labelling of files will make this tool more useful.
- **b. Tabular output.** Usually simple tabular output is also available, providing breakdown of code frequencies which can be exported to Word, Excel or SPSS. Programs vary in the types of tables that can be generated. Output also varies in terms of the level of its interactivity with live source data. Results of searches can be viewed often in both output format or inside the software, integrated into the working project. When the software supports neither the use of mapping nor more graphic representations of coding schema etc., these can usually be exported and pasted or inserted in Word files.

# 7. Summary

The combination of these key aspects of a CAQDAS program means that the researcher is able to keep in reliable and continuous contact with the different elements of the project and the analytic processes. When used systematically and within the individual researchers' 'comfort zone', any of the available CAQDAS programs can aid continuity, and increase 'transparency' and methodological rigour.