

Computers in psychiatry

An introductory course

D. J. WILLIAMSON, Research Registrar, Department of Clinical Research, Crichton Royal Hospital, Dumfries DG1 4TG

2. Word processing

Computers themselves do very little other than make a rather soothing whirring noise and blink expectantly at you. It is the application software that you do work with, not the computer itself. Before we look at some of the common software applications, a brief word about files.

Files

Most computers store everything as files. DOS files are named with an eight character prefix, a dot, then a three character suffix, e.g. FILENAME.EXE. (More of this later.) The files which actually contain the software for any given application are called program files, and in DOS have strange suffixes such as .EXE, .COM, .OVR and .BAT. The files which you create and store as your work are called data files. Data files may by convention be referred to by other names depending on the type of application with which they were created. For example, word processing data files are normally called documents (often ending in .DOC), and spreadsheet files are often called worksheets (.WKS).

Word processing

A word processor is not a machine! It is *software* not hardware. Put simply, a word processor is a program which allows you to create, store, format, manipulate and print text. Typically you run the word processing application on your PC, which transfers the program files from the hard disk to RAM memory. Then you open up or create your document, which may be anything from a letter for your bank manager to your entire PhD thesis. You then work on your document, adding to it and modifying it, before saving the revised version back onto magnetic media. You may then wish to print it out on your printer. Certain features common to most of the wide range of commercially available word processors facilitate the manipulation and formatting of text.

Word wrap. Unlike a typewriter, when you reach the end of a line with a word processor there is no need to

press a key to move on to the next one. The word you type is moved on to the next line automatically if there is no room for it, and the remaining words are re-spaced accordingly.

Insert/delete. By moving the cursor to a point in your document and typing, you can insert text (letters, words or entire paragraphs) into your existing work. Even this most simple of functions would necessitate completely re-typing a page, or plastering it in typex, if you were using a typewriter.

Cut/paste. If you want to re-position a phrase, sentence or paragraph in your document, there is no need to delete it from one position and re-type it in another. By highlighting the text you wish to move and then marking its desired position with the cursor, you can cut it (or *copy* it) from one position and paste it to another, which may be in another document altogether.

Character formatting. When you come to print out your work, you may wish to take advantage of your printer's ability to print in different type styles (founts) or character attributes. Your word processor will be able to instruct your printer to print text in different founts or sizes, or in formats such as **bold**, *italics* or underlined for emphasis.

Paragraph formatting. Setting tabs and margins is easy and flexible, even with more esoteric styles like hanging indents (such as this paragraph). Text can be aligned with the left or right margins, centred, or aligned on both sides (justified).

WYSIWYG. On many word processors the screen displays text only, and the only way that you can tell certain characters are, for example, underlined, is that they appear as a different colour e.g. yellow for italics, red for underlined etc. A more recent trend is for the word processor to display at all times as close as possible to what you will see when you print out

your document, including character formats, founts, columns and so on. This concept (not exclusive to word processors) is called WYSIWYG, which stands for **What you see (on the screen) is what you get (when you print it out)**.

Print preview. Allows you to see a picture of your printed page exactly as it will appear when printed out, to check layout, character formats etc. An especially important feature on non-WYSIWYG word processors.

Spelling/thesaurus. Most word processors now have a spell checker, which on the more advanced software will also pick up typing and basic grammatical errors. Most also include an online dictionary for defining words, and some have a fully functioning thesaurus which will suggest alternative synonyms. (Irresponsible use of this feature may lead to completely unintelligible documents.)

Headers/footers. Any text or graphics from a page number to a title or even a company logo which appears at the top (header) or the bottom (footer) of every page can be inserted automatically rather than having to be typed in each time.

Outlining. Outlining allows you to condense paragraphs to single lines, and reorganise your document quickly without having to scroll through pages and pages of text.

Styles. Often-used combinations of font, margin settings and paragraph styles, etc, can be saved as a

“style” which can be applied to each new document and without having to alter the default settings every time.

Tables. Tables can be created *de novo* or imported from a spreadsheet or database and then formatted to improve their clarity and appearance.

Mail merge. See Databases section in the next issue of the *Psychiatric Bulletin*.

Desktop publishing

DTP packages offer advanced text and graphics manipulation, especially with regard to layout. Text can be in a wide variety of fonts (often up to 150), and can be laid out sideways, upside down, diagonally or curved, even around graphics, for example. DTP applications are not normally used primarily for the creation of text or graphics, and hence support a wide variety of formats giving them the ability to import from other packages. The distinction between DTP and word processing is becoming increasingly blurred. Many word processors now offer features, such as graphics import, which previously were the exclusive domain of DTP packages, and likewise DTP packages can function as limited word processors. Basically, if it is the appearance and layout of the printed output which concerns you as much as the content, e.g. such as with a magazine or poster, you may need DTP to get the special effects you want. A simple handout, for example, can be transformed by the use of DTP.

Erratum

‘Old age psychiatry and mental handicap’ by N. Pearson and J. Smithies (*Psychiatric Bulletin*, June 1992, 16, 338–339). Dr Wiley was described as

Chairman, Section for the Psychiatry of Old Age. This is incorrect; she is Chairman of the Section for the Psychiatry of Mental Handicap.