Software Guide

CHAPTER 1

Computer software provides a wide variety of supports to research and to researchers. Some of the key computer software packages used by researchers are introduced and explained in this software guide.

Project management software

One very useful software package frequently used by researchers is Project Management software. As the name suggests, this software is used to aid and support project management, and you can use it to support you as you undertake your research project.

Microsoft provides project management software. Microsoft Project is Microsoft's project management software. This software is designed to assist in the development of project plans, in the management of projects and in the tracking of progress. The software allows for access to the project by different users, and different levels of access to the project for different users. The software has a range of facilities, including facilities for graphs and charts. It would be a good idea to log onto Microsoft, at www.microsoft.com, to explore this software and it's capabilities. You might use the software to help you plan and develop your research project.

Another project management software provider is ProjectManager.com, at www.projectmanager.com. As stated on the homepage of the software, this software helps you organize your work, share your project plans, manage the project team online, and track progress.

As you will see, the website offers a tour of the software, the different features of the software are described, and support is provided including FAQs (Frequently Asked Questions) and Support Videos. There is an introduction video, which introduces you to the software, a video on getting started with the software, and a planning video.

CHAPTER 2

CADA – Computer Assisted Data Analysis

There are a number of different software packages available for use in data analysis in social and business research. This is known as CADA (Computer Assisted Data Analysis). SPSS is the Statistical Package for Social Sciences. It is used in the analysis of quantitative data. It would be a useful exercise to begin your work with SPSS to explore SPSS on the internet. There are a number of resources that you will find both interesting and useful on the internet; among these online resources is a tutorial in SPSS. You will find SPSS at www.spss.com

SPSS, as explained, is used in the analysis of quantitative data. In relation to the analysis of qualitative data, there are a number of software packages available. Such software is known as CAQDAS (Computer Assisted Qualitative Data Analysis Software). The qualitative data analysis software packages explored in some detail in this textbook are Atlas ti and NVIVO. There are a number of guides to both Atlas ti and NVIVO on the internet and again you are encouraged to locate these resources so that you can begin to develop your knowledge and understanding of this software. You will find NVIVO at www.qsrinternational.com

CHAPTER 3

Software to check for plagiarism

There is a substantial section on plagiarism in Chapter Two. Plagiarism, as defined in Chapter Two, is the use and/or presentation of somebody else's work or ideas as your own. Plagiarism is a most serious offence and students who engage in plagiarism, even unwittingly, can be expelled from college. There is software available which has been designed specifically to detect plagiarism. Three different companies providing such software are referenced in the chapter. One of those companies is Turnitin. Turnitin is important software and it is used a great deal in the detection of plagiarism in third level colleges. The software is used by college and university lecturers and staff in the detection of plagiarism in work submitted by students. The Turnitin website can be found at http://turnitin.com. It would be a good idea to log onto the Turnitin site and explore the software and the capabilities of the software on the site. As is explained on the website, the software prevents plagiarism and it checks work submitted for originality.

CHAPTER 4

EndNote, ProCite and Reference Manager – software for the compilation and management of bibliographies

These are software tools designed to help with the management of references and with the compilation of bibliographies. This software is very useful and it is simple to use.

As is stated on the EndNote website, EndNote is a Web-based tool for managing and citing references in papers and creating bibliographies. If you log onto the EndNote website at www.endnote.com you will see that you can download a free trial of the software and you can view free online tutorials in the software. You can also sign up for free webinar classes on the software. The online tutorials are always available, the webinar classes are regularly scheduled. The online tutorials are videos, they are engaging and they explain the software clearly and simply. You will easily learn the value of EndNote as well as how to use EndNote by logging onto the online tutorials.

If you long onto the ProCite website at www.procite.com, you will see that you can download a free trial. However training in ProCite is no longer offered.

If you log onto Reference Manager at www.refman,com, you will see that you can download a free trial and you can log onto online tutorials which are always available. You can also participate in webinar classes, which are regularly scheduled. As with EndNote, the online tutorials are videos, and they explain the software clearly and simply.

CHAPTER 5

Software to facilitate survey research

www.surveymonkey.com

There is software available to help with data gathering. This software helps with the design of questionnaires and surveys, the software helps with administering questionnaires and surveys, and the software helps with the analysis of the data gathered. One of these packages is SurveyMonkey. You will find this software at www.surveymonkey.com. You can take a tour of this software on this website. This would be a good idea, it might give you some thoughts on how you might use this software in your own research project. There is some focus on this particular software package in Chapter 12 of this textbook, 'Using Questionnaires and Scales'.

www.snapsurveys.com

Another of these software packages is SNAP Surveys. Similar to SurveyMonkey, it provides software for creating paper and online surveys and questionnaires in any language. It also provides for data gathering and data analysis. The company offers a quick tour of the software and a free trial. The webpage is www.snapsurveys.com.

CHAPTER 6

Software for qualitative research

www.qsrinternational.com

There is above a brief introduction to the qualitative data analysis software package NVivo. NVivo is provided by a company called QSR International. The website for QSR International provides demonstrations of this software as well as a free trial of the software. The url for the website is as follows: www.qsrinternational.com. It would be a good idea to log onto the website and to spend some time exploring this software and the capabilities of the software. When you log onto the website, you will notice that there is a definition of qualitative research and an explanation of qualitative research. The website explains what qualitative research software is and what it does. As stated on the website, qualitative research software like NVivo, helps people to manage, shape and make sense of unstructured information. It doesn't do the thinking for you; it provides a sophisticated workspace that enables you to work through your information. Software packages like NVivo provide a facility for the management of qualitative data and qualitative data analysis. Such software is invaluable in research projects with a lot of qualitative data to manage and analyse.

CHAPTER 7

Some useful guides for survey research

www.questionpro.com

Another software provider is QuestionPro. this software is available at www.questionpro.com. This website offers a tour and a free account and there are free guides to online surveys. These free guides to online surveys are very useful. If you log onto the website and then scroll down to the bottom of the page, you will find there a lot of useful resources. Among those resources there is a link to 'How to Conduct a Customer Satisfaction Survey', and a link to 'How to Conduct an Employee Satisfaction Survey'. If you click on the link to 'How to Conduct an Employee Satisfaction Survey' you will find that it lead to a page which contains, among other things, three sample surveys, Exit Interview, Job Evaluation, Company Evaluation. If you click on each of these you will find that each is a questionnaire, or a survey, designed for the specific purpose detailed in the title. If you browse this website and the links on it you will learn a great deal about survey research.

CHAPTER 8

More software for survey research

www.statpac.com

Another software provider is StatPac. StatPac provides survey software for online and paper questionnaires. The website for the software provides a tutorial on how to use the software and it provides a tutorial on designing surveys. The tutorial 'Designing Surveys and Questionnaires' is over 20 pages long. According to the website, 'the tutorial will teach you how to conduct a survey and design a questionnaire. You'll learn the latest survey research techniques...what works and what doesn't. You'll discover the secrets used to maximize survey response rates, and how to design a questionnaire that gets at the true opinions of your sample. The tutorial is packed with information! It tells everything you need to begin writing your own market research surveys right now. Questionnaires are the most common marketing research method. They are used for structured interviews, written surveys, email and internet surveys. Fortunately, good survey design skills can be learned in a short period of time. We invite you to use this tutorial to become an expert in conducting surveys.' The website also provides a 'Survival Statistics Book' as well as a statistics calculator. The website can be located at www.statpac.com.

www.stata.com

STATACORP is another software company providing software for data analysis. Stata 11 is, according to the website, a fast, powerful statistical package designed for researchers of all disciplines. The website provides an overview of Stata as well as a facility though which you can explore Stata's capabilities. The website also provides tools for learning about Stata and learning how to use Stata. The FAQs (Frequently Asked Questions) on the Stata website provide a lot of interesting information. The website can be located at www.stata.com.

CHAPTER 9

A support for qualitative research and qualitative researchers

http://caqdas.soc.surrey.ac.uk/

The University of Surrey hosts the CAQDAS (Computer Assisted Qualitative Data Analysis Software) networking project. This project provides practical support, training and information in the use of a range of software programs designed to assist qualitative data analysis. The project has no commercial links to any software developer or supplier. The project receives funding from the UK Economic and Research Council (ESRC). Social The project can be located http://caqdas.soc.surrey.ac.uk/. There is an explanation on the website of the close connection of the CAQDAS Networking project resource to the Online QDA website, based at Huddersfield University. We are told that the two resources have been developed in close collaboration and are intended to provide a rounded service to qualitative researchers. More information is provided on the collaboration and the relationship between the two websites. These resources are specifically designed to support qualitative researchers in their use of CAQDAS. A great deal of very useful information and help is provided by them.

CHAPTER 10

Software for observation studies

www.intranel.com

The software company Intranel (www.intranel.com) provides different software packages for use in observational research. One of the software packages is called VideoScribe. According to the website, VideoScribe is easy to use, it allows for the gathering and management of observational data, and it streamlines the process of recording, coding and transcribing digital video and audio. It would be an interesting exercise to log onto the website to explore the different packages offered by the company, and the different capabilities of the different packages. The company does have free demos, however you have to e-mail the company to request access to them.

CHAPTER 11

A guide to Atlas ti (Atlas ti is software for the analysis of qualitative data)

www.atlasti.com

Atlas ti (www.atlasti.com), mentioned above, is software designed to facilitate the analysis of qualitative data. The software can be used to manage and analyse digital audio and visual data, as well as text-based data. Atlas ti is one of the leading software packages used in the analysis of qualitative data. Atlas ti is explored in some detail in Chapter Fifteen Analysing Qualitative Data. The Atlas ti website (www.atlasti.com) provides a lot of information on the software and information on how to use the software. There is a free trial version and there are free tutorials. You

will find the website very helpful and you should log on to it and explore the very valuable software provided.

As an exercise, log onto the Atlas ti website at www.atlasti.com and then click on 'Downloads' in the middle of the webpage, Then click on 'Quick Tour' and then open the document. Scroll down to Contents. You will see that this quick tour introduces you to the basic terms and concepts in Atlas ti and it takes you through the first steps in setting up a project in Atlas ti. It would be a really good exercise to read through this document and to try to understand it. Try to understand and learn the basic terms and concepts in Atlas ti. When you understand the basic terms and concepts you will begin to feel and little more comfortable with the software and a little more confident with it. Read on through the Quick Tour document and discover for yourself the kinds of things that can be done with Atlas ti.

On the Atlas ti website (<u>www.atlasti.com</u>) click on Downloads, and then click on Tutorials. You will notice that there are video tutorials in English and in Spanish. You will find these helpful.

CHAPTER 12

A guide to SPSS (SPSS is software for the analysis of quantitative data)

http://www.spss.com

As explained earlier in this guide, SPSS is a computer software package designed for analyzing quantitative data. You can log onto the SPSS website at http://www.spss.com/. In SPSS downloads, at the bottom right hand side of the website's homepage, you will find a variety of resources including some trial software. At the bottom left hand side of the page there is a resource for managing data.

An interesting online resource for SPSS is that provided by Texas A&M University Department of Statistics. You will find this at http://stat.tamu.edu/spss.php. To begin with, just to get a sense of this resource, click on 'Typing in Data'. This link is halfway down the list of links given on the webpage. If you are patient and allow the resource to do its work, you will find that this is a tutorial. In this tutorial the tutor articulates an explanation of how to load data into SPSS. This is an interesting resource and it might help you develop your understanding of how SPSS works. There is a vast amount of information on this website about SPSS and about the different capabilities of SPSS in terms of data analysis.

Chapter Fifteen of the textbook explores SPSS in some detail. When you have read Chapter Fifteen it might be a good idea to look again at the SPSS guide provided by Texas A&M University Department of Statistics.

CHAPTER 13

More help with Atlas ti (Atlas ti is software for the analysis of qualitative data)

Also helpful in terms of using Atlas ti is the PDF document provided free online by researchers at Stanford University. You will find this document at www.stanford.edu/group/ssds/cgi-

bin/drupal/files/Guides/software_docs_usingatlasti.pdf You can also call up this document in Google using the following: Using Atlas ti for Qualitative Data Analysis. Scroll down the results of the search for the pdf document provided by www.stanford.edu. This document is just eleven pages long. It provides a simple yet thorough introduction to Atlas ti. The document explains how to get started with Atlas ti. It explores working with Hermeneutic Units (Hus). It explains how to create HUs, how to save HUs, and how to open HUs. The document explains how to prepare documents for import into Atlas ti and it explains how to work with documents when they have been imported into Atlas ti. The document explains simply and clearly how to code in Atlas ti. This is a very useful document. It provides, free and online, a complete yet succinct introduction to Atlas ti. If you read through the document a couple of times you will begin to understand what Atlas ti is and how it works. You might then log onto the Atlas ti website at www.atlasti.com and download the free trial version of the software. When you have downloaded the software you can practice using it. This will substantially increase your knowledge and understanding of Atlas ti.

CHAPTER 14

More guides for SPSS (SPSS is software for the analysis of quantitative data) and a guide for Minitab (Minitab is software for the analysis of quantitative data)

SPSS

http://www.statsguides.bham.ac.uk

A useful, and free to use, support for the beginner using SPSS for the first time is 'The How to Guides' provided online by the University of Birmingham. You will find these at http://www.statsguides.bham.ac.uk. When you open the webpage, click on The How to Guides, in the centre of the page. This takes you to the How to Guides for SPSS 10.0. These Guides provide introductions to and explanations of SPSS 10, 11 and 12. In addition, although there may be some differences, the Guides are said to be a good match for SPSS 13 and 14. There are also PDF versions of the Guides for SPSS 9, and there are PDF versions of the guides for Minitab 12.

If you click on the Guide for SPSS 10.0, you will find that it opens up to provide a list of guides. There is a guide entitled File Management and Data Entry. There is a guide entitled Data Manipulation. There is a guide entitled Descriptive Statistics and Chi-Square. There is a guide entitled Graphs. There is a guide entitled Testing for Differences, one entitled Testing for Relationships, one entitled Multivariate Methods and there are others.

Each of these guides provides a substantial amount of information on how to use SPSS and they are freely available online. When you have finished reading the detail on SPSS provided in Chapter Fourteen of the textbook, it would be a good idea to read through these guides. Use the guides to develop your knowledge and understanding of SPSS.

Minitab

http://www.statsguides.bham.ac.uk

As well as guides to SPSS, 'The How to Guides' provided online by the University of Birmingham (http://www.statsguides.bham.ac.uk) provide a guide to the statistical software package Minitab. It would be a good idea to explore Minitab using the guide provided. Minitab is another company providing software for data analysis. You will find Minitab at http://www.minitab.com/en-US/default.aspx. When you're on the Minitab website, click on the link 'Support' at the top of the webpage. This will take you to the page that displays all of the supports provided by the company. You will notice, low down on the right hand side of the screen, that a free 30-day trial of the software is offered. Further down on the right hand side of the screen you will see a number of documents, one of which is entitled 'Meet Minitab'. If you click on this link, you will find a pdf document which provides an introduction to Minitab. This document is provided in twelve different languages including Chinese, Japanese and Arabic.

It would be a useful exercise to spend some time becoming familiar with SPSS and Minitab and the other software packages designed to facilitate the analysis of quantitative data such as STATA, available at http://www.stata.com/. A basic awareness of these different software packages is useful. An active engagement with them is even more useful. You would develop substantial useful and marketable skills if you used one or more of these software packages to analyse the data you gather for your research project. It is likely that some of this software is freely available to you if you are a student at a third level college or university. If this is the case, from time to time tutorials in the use of the software will be provided. You should attend any such tutorials, whether or not you are using the software. Always avail of any opportunity to develop your knowledge and skills.

CHAPTER 15

Books to quantitative and qualitative data analysis

Using Software in Qualitative Research: A Step-by-Step Guide

There are very many useful books on the use of software in qualitative research. One of these books is 'Using Software in Qualitative Research: A Step-by-Step Guide'. Written by Ann Lewins and Christina Silver and published by Sage, the book provides an introduction to the processes and tasks in using qualitative software. The book deals with seven CAQDAS packages, among them Atlas ti and NVivo. There are helpful screen shots in the book and simple explanations of them. In Appendix C the book details the features and functions of the seven CAQDAS packages. In this section there is a good introduction to the features and functions of Atlas ti and NVivo. It would be a good idea to read through the detail provided on the

seven CAQDAS packages. This would provide you with a good basic knowledge of these different qualitative data analysis packages. It would be a good idea then to focus on one of the data analysis packages and to try to develop a good level of knowledge about that package. The two qualitative data analysis packages featured in Chapter Fifteen of the textbook are Atlas ti and NVivo. A substantial amount of information on Atlas ti is presented above. As explained above, you can log onto the Atlas ti website at www.atlasti.com and download the free trial version of the software. As detailed above, Qualitative Solutions Research, QSR NVivo can be found at www.gsrinternational.com.

There are also a substantial amount of useful books and guides on the use of software in quantitative research, among them the SPSS Survival Manual: a step-by-step guide to data analysis using SPSS, written by Julie Pallant and published by the Open University Press. SPSS is explored in some detail in the textbook in Chapter 14, Analysing Quantitative Data. As explained above, you can log onto the SPSS website at www.spss.com

CHAPTER 16

Conclusion

This software guide provides brief introductions to and online resources for the key software packages used in social research. If you focus on developing an understanding of the different software packages introduced in this guide you will have a good basic understanding of this software. If you use one or more of these software packages in your research, you will develop a more sophisticated understanding of the software as well as a substantial amount of knowledge about the software and some skills in using the software. The software packages detailed here are designed to facilitate project management, designed to detect plagiarism, designed to facilitate the design and conduct of data gathering, designed to manage data, designed to conduct or manage the conduct of data analysis, and designed to facilitate the correct compilation of bibliographies. As well as helping you in the work of designing, developing and completing your research project, your engagement with the software packages introduced here in this software guide will facilitate you in developing substantial marketable skills.