Brenda McCormack & Elizabeth Hill



Conducting a Survey

The SPSS Workbook



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Foreword

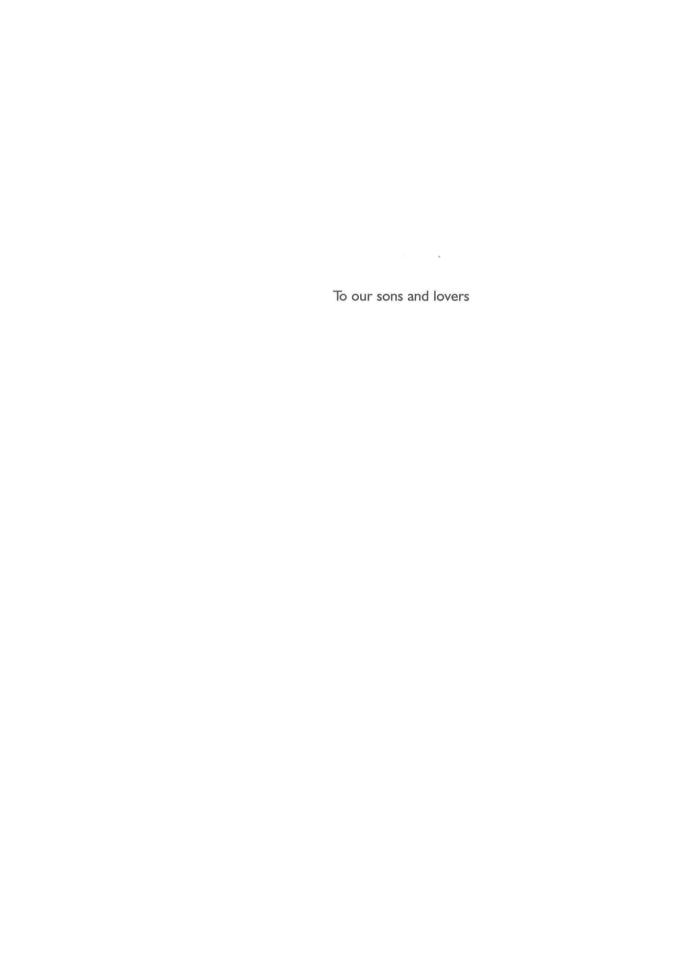
Simon Dunkley, Education Services Manager, SPSS (UK).

As the information technology revolution marches on, we are surrounded with more and more data, and more and more market researchers seem to stop me in the street. Invariably, I find myself bemused by the questions I am asked, and more so by how I am asked them. It seems that in the desire to carry out a survey, the survey designer concentrated on speed rather than quality, or perhaps was lacking in some basic knowledge about the process—'anybody can design a questionnaire, can't they?' Well, yes and no. Yes, anybody can put some questions together. No, because it takes considerable skill and knowledge to make a good job of it. 'And just how,' I often ask myself, 'do they intend to analyse these data, once they have been collected?' This book is about starting that process of design, collection analysis and presentation.

Brenda and Liz first came to my notice via a training course at SPSS some years ago, where their enthusiasm to learn and then to teach was selfevident. They have adopted SPSS as the package of their choice for several reasons - not just that it is the most popular desktop statistical package in the world, but because of its ease of use – and have been at the forefront of helping to develop SPSS's involvement in the production of SPSS teaching materials for university sector institutions. ('At the forefront' is equatable with 'guinea pig' in this context.) As such, they have been involved with SPSS's mission to drive the widespread use of statistics. When they contacted me about a book they wanted to write, I was naturally interested. When they outlined the target audience, and the contents of the book, I felt that here were two people who knew enough about both the subject matter, and the likely readership, to take on a difficult task. Writing statistical material is not easy, even for a technical audience. When the audience simply wants to know enough of the basics to do a job, and no more than that, then it is even more difficult - just what is 'essential' theory, for example, and how will the reviewer react to the omission of their favourite hobby horse? Without falling back on to the prop of mathematics, and by choosing to leave out some of the more complex (and confusing) issues, Brenda and Liz have done an excellent job on introducing statistics and SPSS into the survey process, and showing how a little knowledge of both can help that process. There are plenty of books on the market which go into statistics in more detail, this book is not about that detail - but if it whets your appetite (and it should) then it will have served its purpose. What most other books do not do, is to give guidelines on the presentation of the analysis. For this reason alone, the book is a worthwhile addition to the bookshelves of any student writing reports involving statistics.

I found this a stimulating and practical read, but maybe because Brenda and Liz share so many of my prejudices about statistics (statistics is not about maths, it *is* about getting a computer to turn a wild guess into an educated guess) I am secretly flattered. Enjoy this book – and remember, to paraphrase Chapter 8, 'Keep it simple, statistician'.

Simon Dunkley, Woking, May 1997



Contents

This book is organised so that the reader can learn simultaneously about the process of conducting a survey and the use of SPSS in this process. Each chapter contains reference to both. Anyone who wishes simply to learn how to use SPSS, but is not conducting a market survey, may wish to turn to the topics indicated in **bold** in the following table of contents.

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Chapter I

Introduction

The process of research is one of systematic investigation in a field of knowledge to develop understanding. It is a process which begins with a question to which an answer will be actively sought. Facts and/or figures are collected which, when subjected to a form of scrutiny known as analysis, can help provide answers to the question. The basic principles of this approach can be applied in most disciplines and contexts; in the sciences, arts and social sciences; in businesses and universities; in major government sponsored projects and those conducted on a shoe-string budget. The context will make a difference, perhaps, to the way in which the facts and figures are collected, to the most appropriate analytical techniques to use, and to the level of certainty the researcher requires about the accuracy of the research findings, but the basic principles of research remain the same.

This book uses the context of market research to help readers develop skills in one particular technique for gathering the facts and figures – the survey – and one particular instrument for analysing those facts and figures – the software package known as SPSS. This does not mean that the book is only relevant to market researchers. On the contrary, it is relevant to any researcher wishing to conduct a survey and analyse the data collected by this means. While other sources may have to be consulted to acquire detailed expertise in other types of survey research, most of the concepts presented in this book are of such universal applicability that they can be transposed into other contexts with ease.

This chapter will introduce the broad concept of market research, look at the role of the survey in market research and describe the computing systems which are available to help researchers analyse the findings from their surveys. When you have read this chapter you will be able to:

- prepare a plan for conducting market research
- understand the role of the survey in the process of market research
- construct a research proposal
- understand some basic computing concepts which relate to the use of the windows operating system
- run the SPSS software package
- recognise the components of the SPSS windows
- open, edit, save and print data files using SPSS
- open, edit, save and print output files using SPSS
- complete Exercises 1a and 1b.