SPSS for Social Scientists

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Consultant editor: Jo Campling

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First published 2002 by
PALGRAVE MACMILLAN
Houndmills, Basingstoke, Hampshire RG21 6XS and
175 Fifth Avenue, New York, N.Y. 10010
Companies and representatives throughout the world

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ISBN 978-0-333-92286-6 ISBN 978-0-230-62968-4 (eBook)
DOI 10.1007/978-0-230-62968-4

This book is printed on paper suitable for recycling and made from fully managed and sustained forest sources.

A catalogue record for this book is available from the British Library.

A catalogue record for this book is available from the Library of Congress.

10	9	8	7	6	5	4	3	2	1
11	10	09	08	07	06	05	04	03	02

Typeset in Great Britain by
Aarontype Ltd, Easton, Bristol

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PREFACE

Statistics and quantitative methods courses in the social sciences often suffer from an inability to make a link between the skills they seek to impart and present-day society. They can be made more attractive to students by illustrating analytic methods with examples from the contemporary world and involving students in computer analyses of real data. As teachers of statistics and quantitative methods courses in three universities in the British Isles, we were aware of the need for locally interesting datasets that would be available to students in the social sciences. The availability of the British Social Attitudes (BSA) Survey brought with it the possibility of utilising the research data that had been collected in teaching.¹ This use is particularly appropriate given the commitment of the organisers of the BSA surveys to disseminating the results of the survey to the widest possible audiences.

As well as providing ‘raw material’ for statistical analysis exercises on a research methods training course, the four datasets – ‘Crime’, ‘Health’, ‘Welfare’ and ‘Politics’ – constitute significant bodies of information about contemporary British society. The data provide the basis for the substantive consideration of attitudes and social structure in Britain and could be used to great effect on social science courses in disciplines such as Criminology, Health Studies, Sociology, Social Policy and Political Science.

Layout and scope of the book

The text begins with two introductory chapters. The ‘Introduction’ chapter places ‘the quantitative perspective’ within the landscape of the social sciences and then moves on to discuss the logic underlying statistical analysis. This is followed by an ‘Orientation’ chapter that gives information about the British Social Attitudes Survey and explains the Windows ‘environment’ as it relates to SPSS. This chapter tells the student about the general layout of SPSS and gives advice about general ‘housekeeping’ that will ensure that carrying out practical work with the program is efficient and trouble-free. SPSS has built-in features for advising and helping users. How to access and use these is explained in this ‘Orientation’ chapter.

The two introductory chapters are followed by ten modules that provide instruction about the practicalities of carrying out statistical analyses with SPSS. This begins with Module 1 on ‘Data Input’, moves through procedures for looking at individual variables in Module 2, ‘Listing and Exploring Data’, to the important topic of data refinement in Module 3, ‘Data Selection and Manipulation’, and then on to seven modules that present the practicalities of different types of statistical analysis with SPSS. The text ends with a ‘Conclusion’ chapter that provides advice about the procedures for selecting appropriate statistical tests.

¹ Note that the four datasets have been adapted from the BSA for use as *teaching datasets*. While the data are of high quality, changes have been made to make them more suitable for student use – most notably the simplification of the missing values codes used in the survey and the construction of additional scales for teaching purposes. This different treatment of missing values means that some of the percentage tabulations given in Appendix 3 may not agree precisely with those found in the teaching datasets. Academics wishing to use the BSA data for research purposes *must* make use of the original BSA datasets.

The four practice datasets are integral to the successful use of this textbook and it is essential that students have a genuine understanding of the contents of these datasets. To make this understanding possible, three Appendixes are provided:

- Appendix 1 – *The Dataset Variables Quick Look-up Guides*. A comprehensive listing and brief description of all the variables in the datasets so that students can locate the variables they need when carrying out exercises.
- Appendix 2 – *Scales*. Descriptions of each of the scales contained in the datasets, including details of their meaning and construction.
- Appendix 3 – *Questions Used to Generate Variables Used in the Practice Datasets*. A reproduction of the exact wordings and response options used in the actual questions asked by the British Social Attitudes interviewers are given so that students can have a genuine understanding of the meaning of the variables they are using in their analyses.

Finally, the text is intended as an introduction to the main data features of SPSS and provides careful step-by-step instruction in the practical details of carrying out statistical procedures and the interpretation of SPSS output. While this necessarily requires the discussion of the logic underlying many of the statistical procedures, this book is not intended to be a 'stand-alone' statistical text. It should be used on a course of study in conjunction with a statistics textbook and/or a program of lectures and readings provided by the instructor.

ACKNOWLEDGEMENTS

The organisers of the British Social Attitudes Survey located in the National Centre for Social Research have overall responsibility for the BSA series. We are grateful for their support and interest in the development of the textbook and that they made the data available for the construction of the practice datasets that accompany this text and allowed us to duplicate portions of the BSA interview schedule and questionnaires.

SPSS, Inc. has allowed us to reproduce windows and output generated by the SPSS programme. This obviously was essential for this text and we are most appreciative of their permission.

Finally, the students at the Queen's University, Belfast, the University of Ulster and Sheffield Hallam University who used a draft version of the workbook during the academic year 1999–2000 provided essential feedback that allowed us to identify areas where the text could be improved. Again, we are grateful for their tolerance and good humour.