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Basic SPSS® Tutorial

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Preface

ne of the most popular statistical programs of all times, IBM® SPSS® Statistics* (which originally stood for Statistical Package for the Social Sciences), is a result of the project started in 1968 at Stanford University, California. As a result of its immense popularity, it is not surprising to find many SPSS textbooks being published. Most of these books are voluminous because they combine SPSS with statistics. The need to teach introductory courses in statistics, with a basic knowledge of SPSS, at Radboud University Nijmegen, the Netherlands, however, called for an abridged version of a textbook.

To achieve this purpose, we refrained from explaining statistical theory almost completely and focused on the commands within the main menus of SPSS instead. The Dutch manuscript was first introduced in 2002 and adapted based on the teaching experiences as we progressed. The end result was this textbook, which helps students understand SPSS, and more important, to work with it. After reading and working with SPSS's commands, students are able to modify and analyze data with the most common SPSS tools available.

Though all figures and instructions in this book are based on SPSS versions 20 to 22, the users of SPSS version 18 or 19 may not find much difficulty in using it either.

This book is targeted to the audience who are novice users in SPSS. We use clear-cut examples from real scientific research, while the reader is invited to replicate the findings as he proceeds. The relevant outcomes included may be used as a reference. Extra assignments are provided at the end of each chapter that can be worked out by the students themselves, without much external guidance, to enhance the effect of learning.

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^{*}SPSS is a registered trademark of International Business Machines Corporation.



Acknowledgments

n 2002, I was requested by the faculty of social sciences of Radboud University Nijmegen in the Netherlands to reframe some statistical courses. The emphasis was shifted from theoretical knowledge toward practical applications, and this book is a result of that process. My thanks to Professor Scheepers, with whom I had discussions regarding simple methods to teach SPSS to social science students who wanted to apply statistics in their research but found it difficult. The Dutch version of this handbook was published mainly to cater to the needs of such students. Our intention was to remove fear from the minds of students who wanted to learn statistics and instill confidence in them. In the Netherlands, over the years, the Dutch version has become a best seller. It is part of the syllabi in five universities and in many college schools. The best compliment, however, came from a student of anthropology: "It is unbelievable that a subject as dull as statistics has been made so interesting!" Even after a decade this statement brings a smile on my face. I am also grateful to the University of Applied Sciences, Hengelo, the Netherlands for requesting me for an English edition in 2013, which paved the way for this international edition. Finally, I would like to thank Anita, Lotte, and Tommy for their love and concern.

-Manfred te Grotenbuis

As a student, even during my college days I got frustrated looking at the massive volumes of SPSS, which were not user friendly. The students who are not familiar with statistics found application of SPSS often difficult. It was during my internship and thesis that I got the opportunity to work on a more practical method to make learning SPSS easy. My thanks to Professor Scheepers for his valuable inputs and suggestions (in the Dutch version) regarding easy application of SPSS for students, which have been included in this book.

—Anneke Matthijssen

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We express our gratitude to Matthew "Iron Man" Bennett for correcting our initial manuscripts and for providing indispensable inputs regarding the usage of English. We extend our special thanks to all the students from Radboud University Nijmegen, the Netherlands, whom we had the privilege to teach and who in turn contributed to the improvement of our lecture materials over the past 12 years. We thank the authorities in IBM SPSS who allowed us to use the screenshots of their program. Last but not least, we are most grateful to copyeditor Krishna Pradeep Joghee and the staff at SAGE Publications, in particular Vicki Knight, who immediately saw merits in this project.

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Manfred te Grotenhuis is an assistant professor of quantitative data analysis and an affiliate of the Interuniversity Center for Social Science Theory and Methodology (ICS). His has published statistical articles in prestigious journals such as *American Journal of Sociology, American Sociological Review, Demography*, the *Journal for the Scientific Study of Religion*, and the *International Journal of Epidemiology*. He has been teaching statistics at the faculty of Social Sciences at Radboud University, Nijmegen, the Netherlands since 1995 and has written several introductory books on SPSS and statistics. He is a recipient of the biennial University Teaching Award of Radboud University. He loves/hates to cycle a 20-mile time trial. He earned his PhD in sociology from Radboud University Nijmegen, the Netherlands.

Anneke Matthijssen started her career as a medical analyst. She was involved in teaching statistics even during her study and after graduating at the Radboud University as well. Since 2008, she works as a policy advisor/institutional researcher at the strategy and development department of the Radboud University. In her position as policy advisor, she provides the board and faculties with management information on education and research. She is also the secretary of the Dutch association for institutional researchers, which comprises the policy advisors of all Dutch universities. Unlike Manfred, she loves cycling in the mountains of Italy. She completed her MSc in educational sciences from Radboud University Nijmegen, the Netherlands.