

Getting to Know **SPSS**

With Endnote, HINARI, PubMed and Google Scholar Supplements

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Getting to Know SPSS

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DEDICATION

This Book is primarily dedicated to my wife, *Ronke* and children, *Oyindamola* (Oyindee), and *AnjolaOluwa* (Anjee). I love you all. In addition, I also dedicate the book to my teachers: *Prof Oginni L.M.* and *Prof'Wale Akinsola*. The former for his humility and excellence in teaching and the later for his selfless interest in training others.

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Preface to the 3rd Edition

SPSS for Windows (Now called IBM SPSS Statistics) allows you to store data, perform data transformations and analysis. You can produce tables, charts and graphs of results. In a fashion similar to Microsoft Excel, data are entered into a spreadsheet, but unlike in Excel, results are displayed in a separate output window. The data file as well as the output can be saved independently of each other. The output can be exported to a word processing application such as Microsoft Word, Adobe PageMaker or Corel WordPerfect for inclusion in papers or reports.

Compared to some other statistical programs, SPSS is user-friendly, still, there often is a steep learning curve that prevents users from using the program effectively. The SPSS manual, like most software manuals, is not the easiest thing to read. Many will not be bothered to read them. Researchers and students all too often take their works to so-called experts who just churn out statistics that are irrelevant and inaccurate.

The primary purpose of this book is to educate readers to effectively and efficiently use SPSS for data analysis. It is written in a style that is designed to be easily understood. It is not a stuffy statistical text that spouts statistical terms that must be crammed. On the contrary, the book provides step-by-step instructions on using SPSS to enter data, prepare data for analysis, analyze the data and understand the output. It is a “how to” book that concentrates on the practical aspects of using SPSS. The book will help novice users in rapidly learning to perform analysis with SPSS. It will also enhance the skills of experienced users in data handling and analysis.

This book will be most useful if you are sitting at a computer; following the steps as you read the text. The text is amply illustrated with figures, which are taken directly from the computer screen and will match what you see on your monitor if you use the provided data files. The data file, *SPSS_demo.sav*, which contains all the data you need to follow most of the instructions in the book can be downloaded directly from the author’s website at [www.oluwadiya.sitesled.com//Files/SPSS%20 Stuff.htm](http://www.oluwadiya.sitesled.com//Files/SPSS%20Stuff.htm).

For those who want to enter the data manually – and this is my recommendation - I have included instructions on how to input the data in *spss_demo.sav* in Appendix A. I recommend this for beginners so that they will become proficient at data entering.

The website also contains the results of analysis generated in output windows. These files have been provided so that you can compare them to the output you generate when you follow the instructions in the book using the sample data file, *SPSS_demo.sav*. The file, *final_data.sav* contains the data after all the procedures in the book have been carried out.

Other data files that you may need are also available on the website. *Titanic.sav* will be needed for the chapter on logistic regression, *satisfaction.sav* will be needed for the chapter on reliability testing, and *date1.sav* is required for the chapter on date and time manipulations. Appendix B contains the lists and descriptions of the files you can download from the internet. This book has been designed to make data manipulation in SPSS easy. Novice users will especially find it easy to use. The results of data analysis are explained and where necessary, real world examples are used. Though examples are mostly taken from the medical field, the book can be used by researchers in other fields, such as demography, economics, administration, marketing and other academic fields where data analysis is necessary.

Based on my extensive experience with helping others with their works, I realized there is a real need for researchers to have some expertise in using reference managers. In the same way, the ability to search and retrieve relevant information from the internet has become indis-

pensable to the average academician. This is why I have included two new chapters covering these topics in this edition. Chapter 17 covers the most important aspects of EndNote, while chapter 18 covers the use of HINARI, PubMed and Google Scholar in retrieving medical publications from the internet.

Genius, according to Thomas Edison, the greatest inventor the world has ever known, is just 1% inspiration, the remaining 99% is perspiration. The secret to becoming proficient in software use is simple. You must practice, practice, and then practice. I suggest you devote at least one hour a day, seven days a week to SPSS till you become reasonably proficient (The point at which you feel you are “reasonably proficient” is for you to decide). Try to solve real world problems. Practice with whatever data you have. Look at the objectives of your proposal, and try by yourself, to analyze the data to realize the objectives using this book as a reference. Resident doctors, MSc. and PhD students who are working on their projects are encouraged to take this approach. It will make your thesis defence and examination so much easier.

Back in 1998, after buying my first PC and grappling with the nitty-gritty of Epiinfo and SPSS; I wished I had a book like this. This book was written with such a wish in mind. It is guided by a simple principle: make the learning of SPSS as simple and as enjoyable as possible.

I hope you derived as much fun reading this book as I had writing it.

Welcome to SPSS.

Prof. Oluwadiya Kehinde

Ado-Ekiti, January, 2013.

What is New in the 3rd Edition

This third edition has been overhauled. Existing chapters have been re-written, with new sections added. Two new chapters have been added. Self help tests and exercises have also been added to each chapter for a more effective learning. The changes are itemized below:

1. **Graphics:** More graphics have been added, the existing ones have been upgraded. The graphics are in colours, so that they bear closer resemblance to the computer display.
2. **Layout:** The layout has been improved. Each page has two columns. The wider one contains the main text. The smaller one contains tips, highlights and exercises for a more effective learning process.
3. **Quotations:** Each page contains a memorable quotation in its footnote. Most of these quotations are on statistics, and I have selected them for their pithiness, humour and their uniqueness. At the very least, I hope some of them will make you laugh, but the real reason why I have included them is that some should give readers a new insight into the topics they are reading, and serve to ginger them.
4. **Chapter 5:** Contains a new section on creating new variables with Automatic Recode.
5. **Chapter 6:** Date and Time Transformations contains a new section on how to subtract two duration variables.
6. **Chapter 7:** Multiple Response Set now includes a section on Multiple Response Crosstab procedure.
7. **Chapter 11:** Multiple Regression has a new section on terms and concepts. The sections on checking assumptions and interpreting the output have also been re-organized to make it easier to understand.
8. **Chapter 14:** The section on Chart Builder has been re-written.
9. **Chapter 17:** A new chapter on Endnote.
10. **Chapter 18:** A new chapter on searching the Internet with HINARI, PubMed and Google Scholar.
11. **Appendix C:** A list containing the description of all the files that are on the companion website.
12. **Appendix D:** Tools of the trade. This section contains examples of software, websites and other things that will make life easier for an academics in a resource challenged setting.
13. **Index:** More detailed and better organized.
14. **Companion website:** The companion website now contains the answers to the exercises in the book. it also contains other useful snippets of information. The website is at : <http://oluwadiya.sitesled.com/Files/SPSS%20Stuff.htm>.

Conventions Used in This Book



HELPFUL TIPS: Indicates tips and hints that will help your understanding of the book.



PRACTICE MAKES PERFECT: Indicates things you can do to improve your skill and understanding.



EXERCISES: Indicates tests for you to take. Answers to the tests are provided on the book's website at : <http://oluwadiya.sitesled.com/Files/SPSS%20Stuff.htm>.

- ◆ **All commands** are written in italics and placed in double quotes.
- ◆ **Menu Items** are capitalized.
- ◆ **Variable names** are also written in italics and placed in double quotes.