

DATA ANALYSIS USING IBM SPSS STATISTICS COURSE

1.1 Introduction

This course is intended to introduce you to IBM SPSS Statistics software that is used to analyze quantitative data. Note that there is other software that can analyze quantitative data but SPSS is user friendly and an easy-to-use software. This course is appropriate for both undergraduate and postgraduate students, practitioners in Research organizations and consultants in Monitoring and Evaluation and any other stakeholder with an interest in data analysis and interpretation.

Data analysis requires an understanding of Statistics and Research Methods. The assumption therefore is that as you register for this course, you have already gone through Statistics and Research Methods. This course will not take you through Statistical Methods Course or Research Methods Course.

For Research Methods, refer to www.researchmethodsclass.com/youtube and learn high quality Research Methods course for free.

1.2 Learning Outcomes

At the end of this course, you should be able to:

1. Describe the scales of measurements and their relationship to data analysis

2. Discuss the types of statistics and their application during analysis;
3. Identify and define variables in the SPSS software;
4. Input data appropriately in the SPSS spreadsheet;
5. Run both descriptive and inferential analysis on SPSS;
6. Interpret and draw conclusions on the SPSS output analysis.

1.3 Course Structure

This course will be divided into 6 modules:

- a) Module 1 is on 'Introduction to Data Analysis. This module will take as through types of statistics, types of hypotheses and types of statistical tests among others;
- b) Module 2 is on 'Introduction to IBM SPSS Statistics'. In this module, you shall be taken through the structure of IBM SPSS Statistics Software, methods of defining variables and methods of entering data;
- c) Module 3 is on 'Descriptive Statistics'. This module will explain all the relevant descriptive statistics, demonstrate how to run descriptive statistics on SPSS and how to interpret descriptive statistics SPSS output;
- d) Module 4 is on 'Inferential Statistics'. This module will explain all the relevant inferential statistics, demonstrate how to run inferential statistics on SPSS and how to interpret inferential statistics SPSS output;
- e) Module 5 is on 'Likert Scale'. This module will take you through how to define variables from a Likert Scale, enter Likert data into SPSS, how to transform and analyze Likert Data;

- f) Module 6 is on 'Open-Ended Questionnaires'. This module will take you through how to define variables and enter data from an Open-ended Questions
- g) Module 7 is on 'Reliability Test'. This will be a fee module that will take you through how to determine reliability of Quantitative Instruments.

Each module has learner centered lessons with practical examples. The lessons have an introduction, content and summary and has used conversational language that enhances learning.

For ease of understanding and practice, the following are uploaded for each lesson:

- a) PowerPoint slides without voice which you can read as notes;
- b) Audio recording for the lesson. The audio is more detailed and explains the power point slides;
- c) Audio recording as I demonstrate how to run the statistical test on SPSS.

1.4 Fee Structure

This total cost for the 4 modules is USD 200.

1.5 Data Analyzed

This course will use data that has been drawn from a sample of 5 students and 5 lecturers as shown below:

Name	Job	Marital Status	No of friends	Alcohol	Income
Leo	lecturer	Divorced	5	10	20,000
Martin	lecturer	Married	2	15	40,000
Andy	lecturer	Married	0	20	35,000
Paul	Lecturer	Single	4	5	22,000
Graham	Lecturer	Single	1	30	50,000
John	Student	Divorced	10	25	5,000
James	Student	Divorced	12	20	100
Mark	Student	Single	15	16	3,000
Jane	Student	Single	12	17	10,000
Grace	Student	Married	17	18	10

Please note that Quantitative Analysis requires a sample that is more than 30 (Central Limit Theorem). However, for the sake of our analysis and explanations, we shall use this data.

It is my hope that you will find this course worth your money and time.

For more information, visit:

Website: <https://www.researchmethodsclass.com>

YouTube: <https://www.researchmethodsclass.com/youtube>

Courses: <https://www.researchmethodsclass.com/courses>

Research Methods eBook: <https://www.researchmethodsclass.com/e-book>

Consultation: <https://www.researchmethodsclass.com/consultancy>

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