



EXECUTIVE COURSE - DATA MANAGEMENT, ANALYSIS & STATISTICAL DATA MODELLING USING SPSS

Contact Persons

Victor Kiwujja
Executive Director
+256773384364/+256704767858
victor@lidaafrica.org
victorkiwujja@gmail.com

Ronald Waiswa
Director, Research & Training
+256703096203
rwaiswa@lidaafrica.org
waiswaronald2012@gmail.com

COURSE INFORMATION

Course Name: **Data Management, Analysis and Statistical Data Modeling Using SPSS**

Total Course hours: **26 hours (In class=18, Exercises=8)**

Language: **English**

Training type: **Hands on training and use of case studies**

INTRODUCTION

SPSS is a software package used for statistical analysis. The software name originally stood for Statistical Package for the Social Sciences (SPSS), reflecting the original market, although the software is now popular in other fields as well, including the health sciences and marketing.

The software is an integrated statistical software package that provides everything you need for data analysis, data management, and graphics. With a point and click interface SPSS is fast, accurate, and easy to use. It is thus a powerful tool for almost all researchers and data analysts.

This course will provide a thorough understanding of data management process, and pragmatic step-by-step training for conducting data analysis and development of databases using SPSS. While the course is centered on the above, it will also impart insights on the importance of data collection, key performance indicators and data quality control and assurance.

WHO SHOULD ATTEND?

This course is targeting Researchers, Statisticians, Monitoring and Evaluation officials, Economists as well as academicians from various international development organizations, foundations, governments, non-governmental organizations and higher institutions of learning who wish to retool their data management and analysis skills. No Prior attendance of a SPSS course is required.

LEARNING OBJECTIVES

- To improve participants knowledge & understanding of M&E data
- To improve practical skills for data analysis and modeling using SPSS
- To share knowledge and experiences in M&E data analysis using SPSS

COURSE OUTLINE

1.0 Understanding data and its concepts.

- ✓ Different types of data
- ✓ Variables (Qualitative and quantitative)
- ✓ Measurement scales
- ✓ Basic statistical concepts

2.0 Data Management using SPSS

- ✓ SPSS Software concepts
- ✓ Designing data entry screens
- ✓ Data coding
- ✓ Data entry
- ✓ Data transformations (generating new variables from existing variables)
- ✓ Merging datasets

3.0 Data Analysis Using SPSS

3.1 Univariate analysis

- ✓ Descriptive statistical analysis
- ✓ Frequency tables
- ✓ Graphing data (pie charts, bar graphs, scatter plots, line graphs)

3.2 **Bivariate data analysis**

- ✓ Correlation analysis
- ✓ Association tests (chi-square tests)
- ✓ Analysis of quantitative and qualitative variables (E.g Comparing means by different categories)
- ✓ Tests for differences (One sample T-test, paired sample t tests, independent sample t-tests, Anova tests)

3.3 **Multivariate Analysis**

- ✓ Data modelling concepts
- ✓ Model specification and selection criteria
- ✓ Linear regression models (simple and multiple regressions)
- ✓ Count dependent variable models (poisson regression models)
- ✓ Binary dependent models (Logit and Probit models)
- ✓ Categorical outcome models (Multinomial logistics models, ordered logit models)
- ✓ Dummy variable regression models