



# CALL FOR APPLICATION FOR TRAINING ON DATA ANALYSIS AND INTERPRETATION WITH SPSS AND STATA



## 1. Background

In today's data driven world, the ability to analyze and interpret data is a critical skill for professionals across various sectors. Whether in academia, research, business, or public policy, data analysis tools like SPSS (Statistical Package for the Social Sciences) and STATA are indispensable for making informed decisions.

This training program is designed to equip participants with the practical skills and knowledge needed to effectively use SPSS and STATA for data analysis and interpretation. By the end of the training, participants will be able to confidently handle datasets, perform statistical analyses, and interpret results to support evidence-based decision making.

## 2. Objectives of the training

## **General Objective**

The primary objective of this training is to enhance participants' proficiency in data analysis and interpretation using SPSS and STATA. Specifically, the program aims to:

- Introduce participants to the fundamentals of SPSS and STATA, including their interfaces, functionalities, and applications.
- Provide hands on experience in data management, including data entry, cleaning, and transformation
- Teach each participant how to perform a wide range of statistical analyses, including descriptive statistics, inferential statistics, regression analysis, and hypothesis testing.
- Enable participants to interpret and present data analysis results effectively using tables, charts, and graphs
- Foster a deeper understanding of how to apply these tools to real world scenarios in their respective fields.

## 3. Expected Output

Upon completion of this training, participants will have gained the skills and confidence to independently conduct data analysis using SPSS and STATA. They will be able to manage datasets efficiently, apply appropriate statistical techniques, and interpret results accurately.

Additionally, participants will be equipped to present their findings in a clear and professional manner, enhancing their ability to contribute to data driven decision making processes in their organizations. This training will also provide participants with a solid foundation for further advanced studies in data analysis and related fields.

## 4. Content

This training is made of the following main topics:

#### Module 1 Introduction to STATA and SPSS

- Overview of STATA and SPSS: Feature, Interface, and Application
- Importing and managing datasets
- Key differences and use cases
- Interface navigation and basic commands
- Data cleaning and transformation techniques

#### Module 2 Data Management & Preparation

- Importing and exporting data (Excel, CSV, databases)
- Data cleaning (handling missing values, duplicates, outliers, errors)
- Recoding variables and creating new variables
- Labeling variables and values
- Merging and appending datasets

#### Module 3 Descriptive Statistics and Data Visualization

- Generating summary statistics (Mean, Median, Standard deviation, etc.)
- Creating tables, charts, and graphs for data presentation
- Frequency distributions and cross-tabulations

#### Module 4 Inferential Statistics and Hypothesis Testing

- Hypothesis testing (t-tests, chi-square, ANOVA)
- Correlation and regression analysis
- Interpreting p-values and confidence intervals

#### Module 5 Advanced Data Analysis Techniques

- Multiple regression analysis
- Logistic regression
- Factor analysis and principal component analysis (PCA)
- Time series analysis
- Panel data analysis (for Stata)

#### Module 6 Interpretation and Reporting of Statistical Findings

• Best practices for analyzing and interpreting statistical results using mathematical

and statistical principles.

#### 5. Participants

This training is ideal for professionals, researchers, academics, and students who are involved in data collection, analysis, and interpretation in their work or studies. It is particularly relevant for individuals in fields such as social sciences, public health, economics, business, education, and public policy.

Participants should have a basic understanding of statistics and a keen interest in developing their data analysis skills. No prior experience with SPSS or STATA is required, as the training will cover both introductory and intermediate level topics.

## Notice: We can offer this training demanded by institutions for their staff at their office or as per their plan

## 6. Date and Venue

This training is scheduled to take place from 15th to 29th April, 2025 from 6:00 pm to 9:00 pm from Monday up to Friday. The training will be hosted at the office of the firm which is located in the city of Kigali – Nyarugenge District, at KN 1 Ave 55 (Near Sainte Famille Hotel).

## 7. Registration

The registration fee is 20,000 Rwf. Interested applicants are encouraged to pay the registration fee through Momo pay: \*182\*8\*1\*1588357#, in the name of The Result Consult Co. Ltd. For more information, you can always visit www.theresult.rw or contact us through 0781004638.

This is the link for registration: https://forms.office.com/r/qd67cd9Dy9

## 8. Facilitator

The training will be conducted by an experienced data analyst and statistician with extensive expertise in using SPSS and STATA for research and practical applications. The trainer holds advanced qualifications in statistics and has a proven track record of delivering high quality training programs to diverse audiences.

With a focus on practical, hands-on learning, the trainer will guide participants through the intricacies of data analysis, ensuring that they gain the skills and confidence needed to apply their knowledge in real world scenarios.

## 9. Post training support

We offer an option of post training support for a period from 1 month to 3 months to ensure that, we stick to the main and specific objectives of the training. Apart from this, we offer on the job coaching to ensure that skills are applied effectively and productively.

## 10. Certificate

At the end of the training, we provide a certificate of completion

Deadline for application is due 15th April, 2025 by 5PM; Kigali Time

Done at Kigali 28th March, 2025

Sylvain Bikorimana Managing Director

Towards the result