

ONE WEEK WORKSHOP ON SPSS/STATA

Organized by

Centre for Economic and Social Studies

(Planning Dept., Govt. of Telangana&ICSSR-Ministry of Education, Govt. of India)

Division for Graduate Studies 8 -13 May 2023

About CESS: The Centre for Economic and Social Studies (CESS) was established as an autonomous research centre in 1980. The Indian Council of Social Science Research (ICSSR, Ministry of Human Resource Development, Government of India) recognized it as a national institute in the year 1986 and included the Centre in its network of institutions. Conducting inter disciplinary research in analytical and applied areas of social sciences, encompassing socioeconomic and other aspects of development, constitute the predominant activities of the centre. The centre conducts full-time Ph.D programme in Development Studies in collaboration with Telangana University.

About the workshop: The workshop is designed for the doctoral students who are in their initial/mid phase of research and plan to use SPSS/STATA in their research. It aims to provide comprehensive knowledge of basic and advanced techniques useful for various research areas. The participants will get an opportunity to learn the modelling using IBM SPSS Statistics and STATA.

Eligibility: Scholars pursuing their Ph.D (beginners and mid-level) in Social Sciences in Universities and Research Institutions across India. Selection of the participants will be on first-cum-first basis. **Prerequisite**: Knowledge of Elementary Statistics and Econometrics. Participants are requested to bring their own laptops with **SPSS** (**preferably 25**) and **STATA** (15/16/above) installed.

Total number of Participants: 30 Dates: 8 May 2023 - 13 May 2023

Venue: Centre for Economic and Social Studies, NO Campus, Begumpet, Hyderabad-500016

For outstation research scholars

Accommodation: Accommodation shall be provided on a sharing basis for outstation participants and would be allocated on first-cum-first basis. Participants should mention the same while submitting the online registration form. The participants have to make their own arrangements for travel.

Registration Fee: Rs. 6000.00. (Rs. Six Thousand) with accommodation, Rs 3000 (Rs. Three thousand) without accommodation. The registration fee includes meals during the programme and boarding, lodging (whenever applicable).

How to apply: Application form to be filled

Last date for submission of application: 21 April, 2023 to research@cess.ac.in

Payment details will be conveyed to the participants with the accepted forms

Participation certificates will be given

Getting Familiar with IBM SPSS Statistics and STATA Overview

Course is to introduce you to the *uses and functions of the IBM SPSS Statistics and STATA*. This workshop will be practical, hands-on training oriented and covers the topics from basics of data processing, tabulation and analysis. The focus will be given to interpretation of the generated tables rather than theory.

Days	Conten	its
8 May 2023	1.	Introduction to IBM SPSS Statistics
		1.1. Basic Structure and functionalities of IBM SPSS Statistics
		1.2. How different from Spreadsheet (Excel)
		1.3. Data Editor Window, Output Window and Syntax Window
	2.	Reading Data
		2.1. Reading data from SPSS data files
		2.2. Reading Excel data
		2.3. Reading data from a Database
		 Reading data from a Text file (Data extraction from large data sets viz., NSSO, PLFS and NFHS)
	3.	Organising dataset
		3.1. Data creation: Variable Types; Defining Variables
		3.2. Editing and Modifying Variables and Data Values,
	4.	3.2.1. Data Preparation and Data Transformation Working with Output
		4.1. Reading the Output
		4.2. Modifying the Tabulation of Results
	Afterno	oon Session: 1.30 PM to 5.30 PM - Hands-on lab exercises for SPSS
9 May 2023	5.	Checking and Exploring Data
		5.1. Descriptive Statistics: Mean, Median, Mode, Sum, Range, Standard Deviation
		5.2. Frequency Tables, Crosstabs, Custom Tables
	6. Working with Syntax	
		6.1 Pasting and Editing syntax
		6.2 Opening and running a syntax file
	7	Data Visualisation: Graphical displays
		7.1 Building/creating Charts/graphs and modifying
		7.2 Line, Bar and Pie Charts
		7.3 Scatter
	8	Analysing Data
		8.1 Parametric significance tests: T-test, F-test and Correlation
		8.2 Nonparametric significance tests: Chi-square8.3 Causal Analysis and Interpretation: OLS Linear Regression
	Afterno	oon Session: 1.30 PM to 5.30 PM - Hands-on lab exercises for SPSS

10 May 2023	9	Introduction to Stata 9.1 User interface
		9.2 Data menus and commands
	10	Exploring Data Sets in Stata
		10.1 Cross section data
		10.2 Time series data
		10.3 Construction of panel data
		10.3.1 Reshaping wide to long and long to wide
	11	Data Processing and Management
		11.1 Graphs, charts, editing, creating new variables, using if conditions and other basic functions
		11.2 Summary statistics
		11.2.1 Cross section
		11.2.2 Time series
		11.2.3 Panel data
11 May	12	Simple Statistical Techniques
2023		12.1 Correlations
		12.2 Sample group techniques
		12.3 Categorical variable methods and other related methods across data sets
	13	Simple Regression Methods and Diagnostic Tests
		13.1 Cross section
		13.1.1 Simple regression
		13.1.2 Level-level, log-level, level-log, and log-log methods
		13.2 Time series
		13.3 Panel data
12 May	14	Data Visualization Methods
2023		14.1 Introduction to data visualization and mapping
		14.2 Data merging
		14.3 Generating maps
		14.4 Spatial correlation methods
13 May	15	Project work
2023		15.1 Assessment of project based on primary data

Learning Outcomes

Upon completion of the course, you will be able to use SPSS and Stata efficiently for basic analyses and graphics. You will be able to do this in a reproducible manner, making collaborative changes and follow-up analyses much simpler. Finally, you will be handling various large-scale complex database for detailed analysis using STATA.

The filled in application form should reach research@cess.ac.in on or before 21 April, 2023