

SPSS - Statistical Package for the Social Sciences

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What is SPSS?

- SPSS is a comprehensive and flexible statistical analysis and data management solution
- SPSS is a computer program used for survey authoring and deployment, data mining, text analytics, statistical analysis, and collaboration and deployment
- SPSS can take data from almost any type of file and use them to generate tabulated reports, charts, and plots of distributions and trends, descriptive statistics, and conduct complex statistical analyses.
- SPSS is among the most widely used programs for statistical analysis in social science.

About SPSS

- It is developed by Norman H. Nie and C. Hadlai Hull of IBM Corporation in the year 1968. It is compatible with Windows, Linux, UNIX & Mac operating systems. SPSS is among the most widely used programs for statistical analysis in social science.

Used in...

- Telecommunications,
- Banking,
- Finance,
- Insurance,
- Healthcare,
- Manufacturing,
- Retail,
- Consumer packaged goods,
- Higher education,
- Government,
- and Market research.

Features of SPSS

- It is easy to learn and use.
- It includes a full range of data. management system and editing tools.
- It provides in-depth statistical capabilities.
- It offers complete plotting, reporting and presentation features.

Getting data into SPSS

- Creating new SPSS data files
- Opening existing SPSS system files
- Importing data from other file formats

Entering Data - DATA EDITOR

- The data editor offers a simple and efficient spreadsheet like facility for entering data and browsing the working data file.
- This window displays the content of the data file.
- One can create new data files or modify existing ones.
- One can have only one data file open at a time.
- This editor provides two views of the data, DATA VIEW
- Displays the actual data values or defined value labels. VARIABLE VIEW
- Displays variable definition information, including defined variable and value labels, data type, etc.,

Variables

- Variable is a user defined name of Particular type of data to hold information (such as income or gender or temperature or dosage). Array of variable is a collection values of similar data types.
- Variables types
 1. Numeric
 2. Comma
 3. Dot
 4. Scientific notation
 5. Date
 6. Custom currency
 7. String

Rules for Variable Names

- Names must begin with a letter.
- Names must not end with a period.
- Names must be no longer than eight characters.
- Names cannot contain blanks or special characters.
- Names must be unique.
- Names are not case sensitive. It doesn't matter if you call your variable CLIENT, client, or CliENt. It's all client to SPSS.

BASIC STEPS IN DATA ANALYSIS

- Get Your Data Into SPSS: We can open a previously saved SPSS data file, read a spreadsheet, database, or text data file, or enter directly in the data editor.
- Select a Procedure: Select a procedure from the menus to calculate statistics or to create a chart.
- Select The Variable For The Analysis: Variables in the data file are displayed in a dialog box for the procedure.
- Run The Procedure: Results are displayed in the viewer.

STATISTICAL PROCEDURES

- After entering the data set in data editor or reading an ASCII data file, we are now ready to analyze it.
- The Procedures Available are Reports Descriptive Statistics Custom Tables Compare means General Linear model (GLM) Correlate Regression Loglinear Classify Data Reduction Scale Non parametric tests Time Series Survival Multiple response.

Advantages

- SPSS offers a user friendliness that most packages are only now catching up to. It is popular, and though that is certainly not a reason for choosing a statistical package, many data sets are easily loaded into it and other programs can easily import SPSS files.

Disadvantages

- For academic use SPSS lags notably behind SAS, R and even perhaps others that are on the more mathematical rather than statistical side for modern data analysis.
 - Its menu offerings are typically the most basic of an analysis and sometimes lacking even then, and it makes doing an inappropriate analysis very easy.
 - It is expensive, sometimes ridiculously so, and even when you do buy you're really only leasing, and its license is definitely not user friendly.
 - There are often compatibility issues with prior
- References: Argyrous, G. (2005-11-23). *Statistics for Research: With a Guide to SPSS*. London: SAGE. [ISBN 978-1-4129-1948-7](#).
- [Wellman, B.](#) (1998). "Doing It Ourselves: The SPSS Manual as Sociology's Most Influential Recent Book". In Clawson, Dan (ed.). *Required Reading: Sociology's Most Influential Books*. Amherst: [University of Massachusetts Press](#). pp. 71–78. [ISBN 978-1-55849-153-3](#).