Statistical Package for the Social Science

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Introduction

Statistical package for the social sciences (SPSS) statistical software developed by IBM for data management, advanced analytics, multivariate analysis, business intelligence, and criminal investigation. SPSS was released in its first version in 1968. And IBM acquired it in 2009. SPSS is used to investigate logical information related to sociology. This information can be utilized for statistical surveying, overviews, information mining, and much. Several variants of SPSS statistics grand packs are highly discounted versions sold only to students. The many features of SPSS statistics are accessible via menus or can be programmed with a command syntax language. SPSS consists of a feature through which internal file structure, data types, data processing, and matching files, together can simplify programming. SPSS statistics can read and write data also spreadsheets, database and statistics packages.

Developers: "NORMAN H.NIE, DALE H.BENT, C.HADLAI HULL"

Operating system: windows (x86-64), macOS (x86-64), linux (x86-64,ppc64le, IBM Z)

Platform: JAVA, SIZE: 1.2 GB

Features

(1) Visualization designer allows researchers to use their data for a variety of visual representations

(2) Modeler program that allows for predictive modelling

(3) Text analysis helps to derive insights from qualitative inputs through open ended questionnaires

(4) Data editor is a versatile spreadsheet like system for defining, entering, editing, and displaying data

(5) Statistical program for quantitative data analysis includes frequencies, cross tabulation, and bivariate statistics

Uses of SPSS

(1) SPSS is a widely used program for statistical analysis in social science

(2) Used by market researchers, marketing organizations, data miners, health researches and others

(3) In planning, data collection, analysis, reporting, deployment process

(4) Provides data analysis for descriptive and bivariate statistics

(5) Data transformation, graphing and direct marketing features

(6) Developing critical thinking and making decisions

(7) Can be used in any field of study to investigate why things happen

(8) Spss used by various researchers for quantitative analysis of complex data

(9) Data entry, data cleaning, surveys

(10) Predictive analysis, descriptive analysis and output

(11) Data management and documentations

(12) Parametric and non parametric tests of relationship and differences.

Types

(1) Variable view: it contains descriptions of the attributes of each variable in the data file in variable view rows and variable columns are variable attributes it also includes name, label, type, width, decimal, value, missing, align, measure. The variable view shows the properties for each variable in the dataset. It also displays information about the variables in data.

(2) Data view: it is displayed as rows and columns file can be imported and data can be added manually it enables to create different views of the data stored in a data table by using data view data in a table with different sort orders and filter data by row state or based on a filter expression can be exposed.

Advantages

(1) Effective data management, offers reliable and fast answers

(2)   Useful for both qualitative and quantitative data

(3)   SPSS users can select the graph type which matches their data distribution requirement

(4)   One of the easiest statistical tools to analyze data

(5)   It can provide many types of analysis which are not available in packaging program

(6)   Data manipulation its advantage

(7)   Creates new variables from existing information

(8)   Does all calculation, user friendly, can be used widely

(9)   GUI based program have quick descriptive statistics capabilities

(10)   Runs on windows, linux, and macintosh operating system

Role of SPSS in Education

Statistics helps a student to be able to effectively conduct research, read and evaluate journal articles, develop critical thinking and analytic skills. Statistics help in the individual comparison of students differing in respect of their ages, abilities, and intelligence levels. It is statistics which tells us why thus students who are similar in every other respect yet do not show similar achievement in one particular subjects.

Conclusion

SPSS is a software program used for quantitative analysis of complex data it has innumerous advantaged, uses and features. It is used in various fields for researches.