

Lecture#5

Describing Data in SPSS

Describing Data

To describe qualitative variable use:

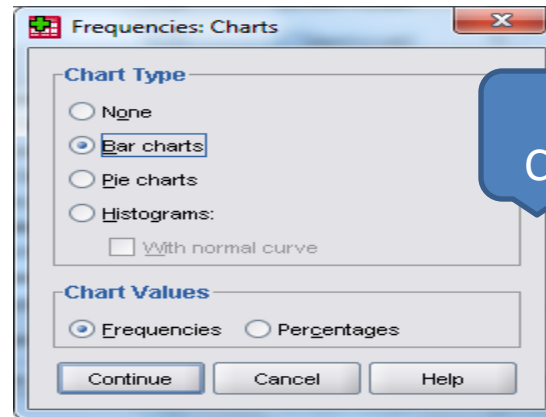
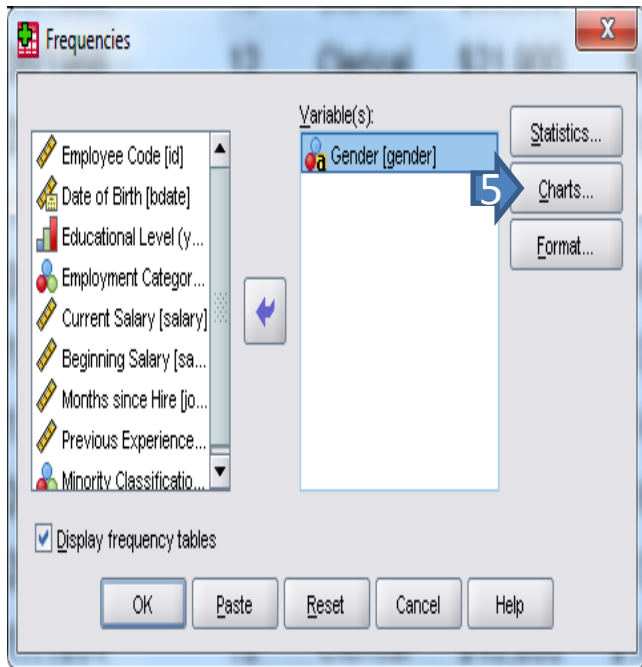
- Frequency table
- Bar chart and pie chart

Review Employee Data file in SPSS and select variable “Gender” as qualitative variable

The figure consists of three sequential screenshots of the SPSS software interface, illustrating the steps to generate a frequency table for the 'Gender' variable.

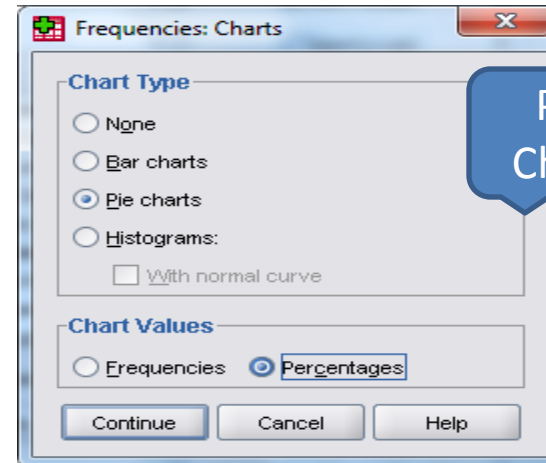
- Screenshot 1:** The 'Analyze' menu is open, and the path 'Descriptive Statistics' > 'Frequencies...' is selected. A blue arrow labeled '1' points to this menu path.
- Screenshot 2:** The 'Frequencies' dialog box is shown. The variable 'Gender [gender]' has been moved from the list of variables to the 'Variable(s):' box. A blue arrow labeled '2' points to this box.
- Screenshot 3:** The 'Frequencies: Statistics' sub-dialog box is shown. Under the 'Central Tendency' section, the 'Mode' checkbox is selected. A blue arrow labeled '3' points to this checkbox.

Describing Data



Bar
Chart

or



Pie
Chart

Describing Data

To describe quantitative variable use:

- Histogram, Boxplot and Stem-leaf
- Measures: Mean, Median, Mode, Variance, Standard deviation, Range, Inter-quartile range, Skewness and Kurtosis

Review Employee Data file in SPSS and select variable “Salary” as quantitative variable

Describing Data

Employee data.sav [DataSet1] - SPSS Statistics Data Editor

File	Edit	View	Data	Transform	Analyze	Graphs	Utilities	Add-ons	Window	Help
1: id 1.0										
	id									
1	1	M								
2	2	M								
3	3	F								
4	4	F								
5	5	M								
6	6	M								
7	7	M								
8	8	F								
9	9	F								
10	10	F								
11	11	F								
12	12	M								
13	13	M								
14	14	F								

Analyze > Descriptive Statistics > Explore...



Explore

Dependent List: Current Salary [salary]

Factor List:

Label Cases by:

Display: ☒ Both ☐ Statistics ☐ Plots

OK Paste Reset Cancel Help



Explore: Plots

Boxplots: ☒ Factor levels together ☐ Dependents together ☐ None

Descriptive: ☒ Stem-and-leaf ☒ Histogram

☐ Normality plots with tests

Spread vs Level with Levene Test: ☒ None ☐ Power estimation ☐ Transformed Power: Natural log ☐ Untransformed

Continue Cancel Help

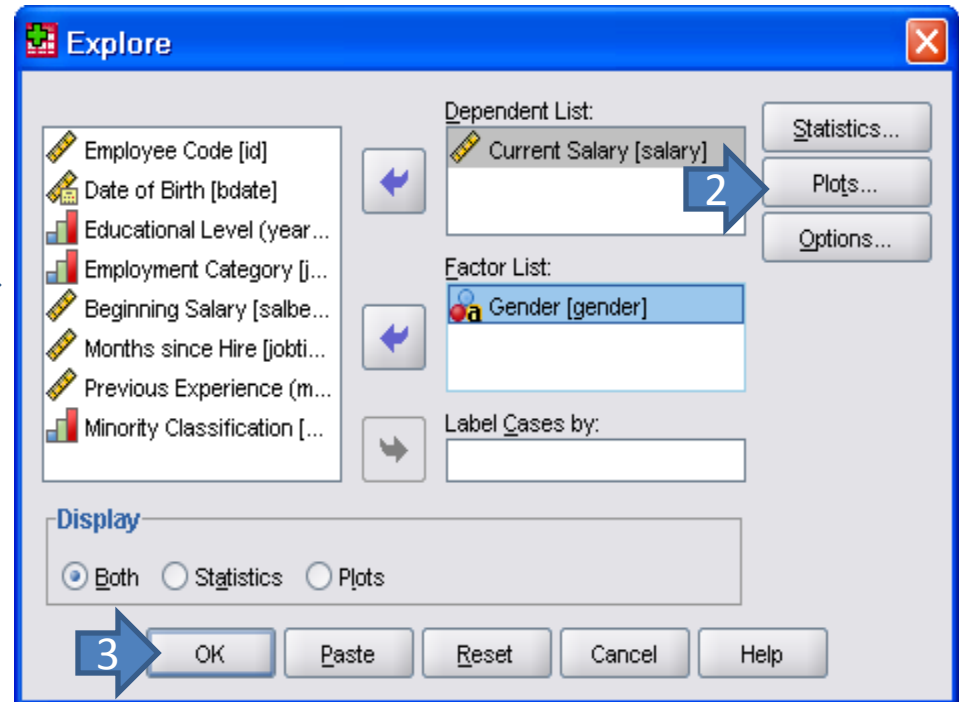
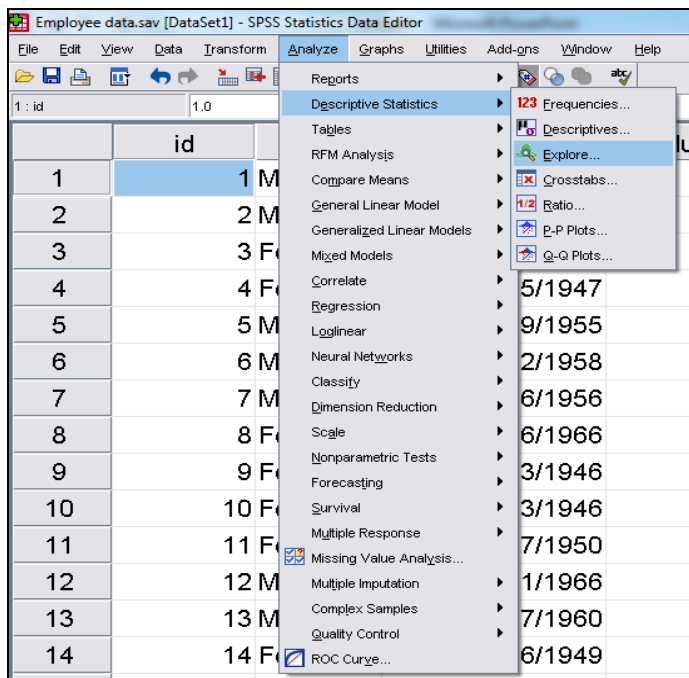


Describing Data

Describing quantitative variable divided by qualitative variable:

Example: Describing salary divided gender

Method#1:



Describing Data

Example: Describing salary divided gender

Method#2:

