Lecture 7: _Charts and Graphs in SPSS_

Tasks;

1. To what extent are academic ability and parents' education related to one another? Use **scatterplot** of the data to assess any relationship.

2. Produce the different type graphs for the relevant variables

3. Draw a bar chart to display **student motivation (sm).**

4. Change the bars' color into white or any color you like.

Tips for Task 1

From the **Graphs** pull-down menu, select **Scatter** (see fig1). You will see a dialog box asking you to choose a type of scatterplot. Click on **Simple** and then the **Define** button (see fig 2). Choose variable "**aa**" for the y-axis and choose variable "**pe**" for the x-axis (see fig 3). Next, click the Titles button, type "Scatterplot" for **Title Line 1,** type "academic ability and parents' education" for **Title Line 2,** and click the **Continue** button (see fig 4). Finally, click the **OK** button and take a look the chart that is produced. Can you see any relationship between these two variables? (See fig 5).
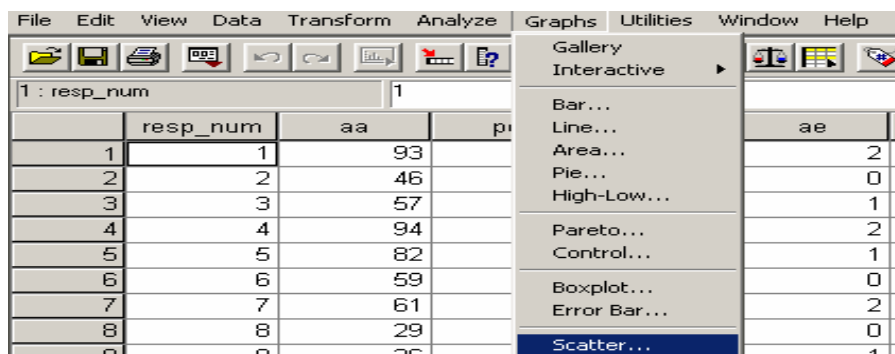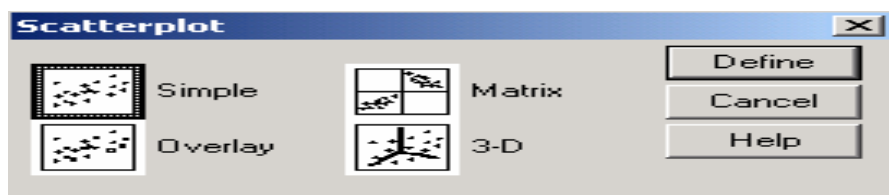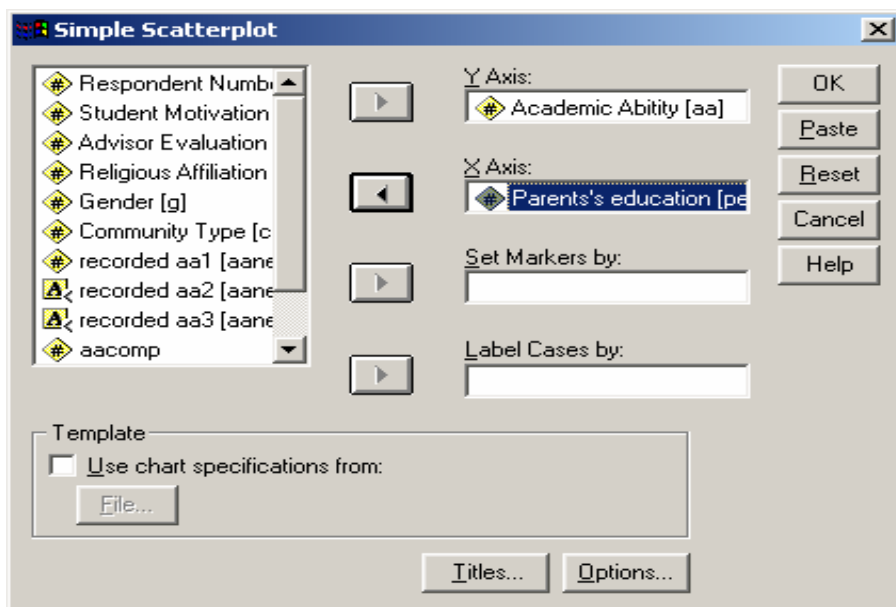

FIG 1

FIG 2

Simple Scatterplot

Respondent Numb
Student Motivation
Advisor Evaluation
Religious Affiliation
Gender [g]
Community Type [c
recorded aa1 [aane
recorded aa2 [aane
recorded aa3 [aane
aacomp

Y Axis:
Academic Abity [aa]

X Axis:
Parents's education [pe

Set Markers by:

Label Cases by:

Template
☐ Use chart specifications from:
File...

Titles...   Options...

OK
Paste
Reset
Cancel
Help

FIG 3

Titles

Title
Line 1: Scatterplot
Line 2: Academic Ability and parents Education

Subtitle:

Footnote
Line 1:
Line 2:

Continue
Cancel
Help

FIG 4

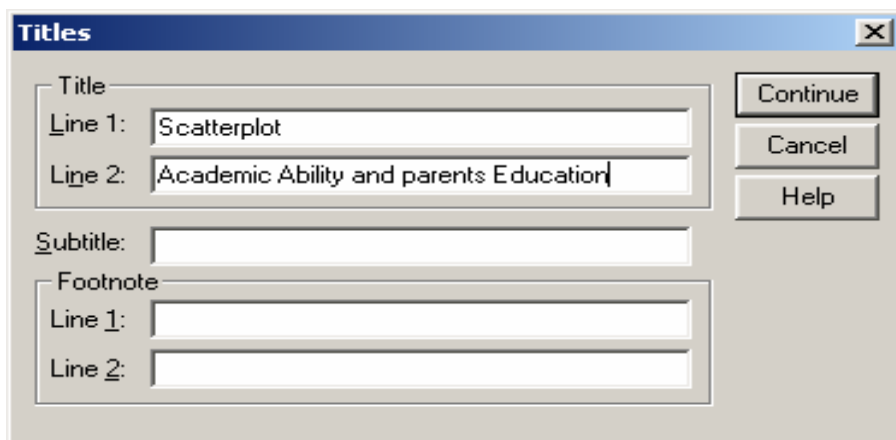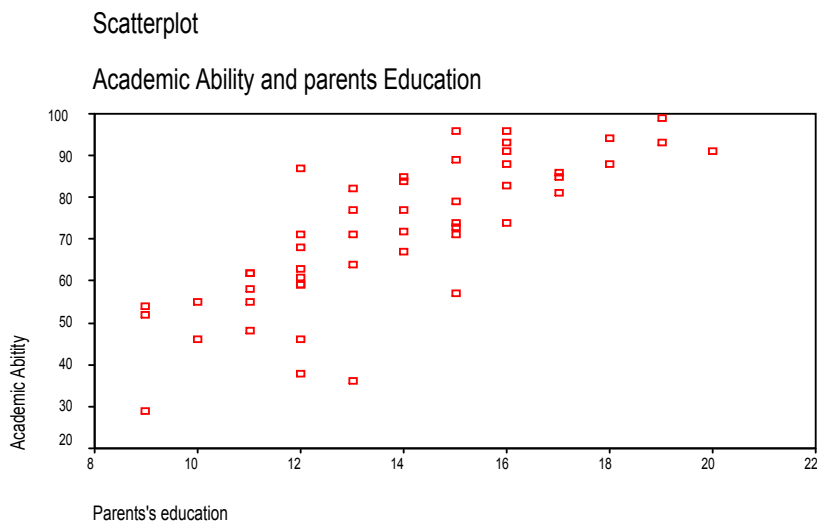Scatterplot

Academic Ability and parents Education

FIG 5

Tips for Task 2

*To create the graphs of the existing variables, go to **the graph drop-down menu** and choose **bar** option and click **simple option** in the **bar chart** box (See Figure 6) and then select **summaries for groups of cases** in **data chart in area** as appears in fig 7. In another dialog box, select the relevant variable (**academic ability**) in the **category axis** area to get the final product by clicking **ok** button. Then, repeat the same process for **line** chart, **area** chart, **pie** chart, and **histogram** chart and apply this process for the other variables. (See Fig 8)*
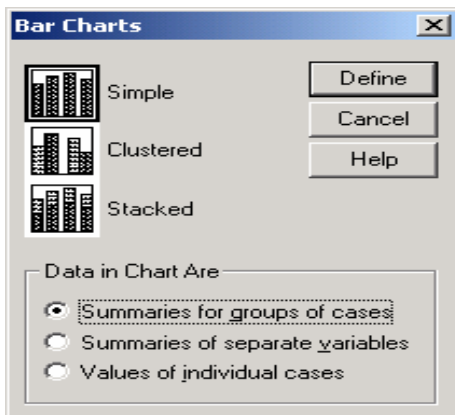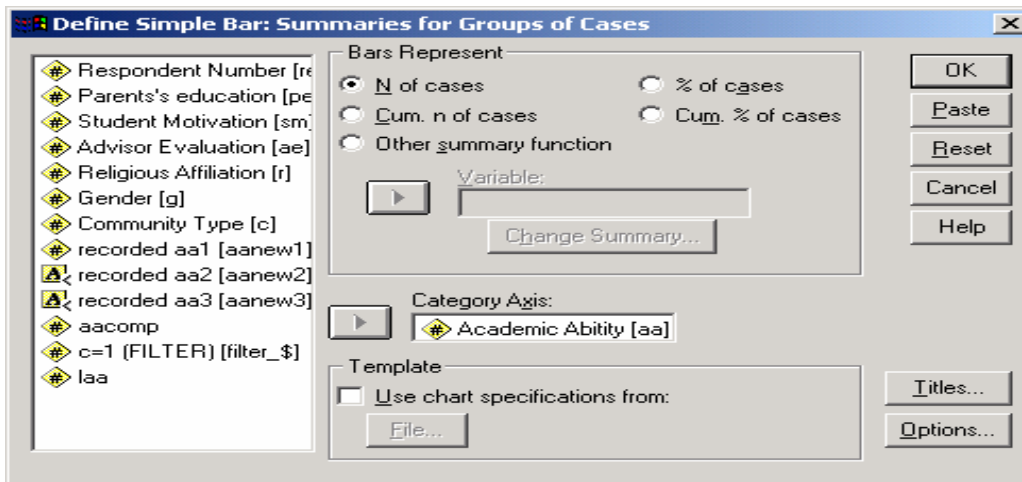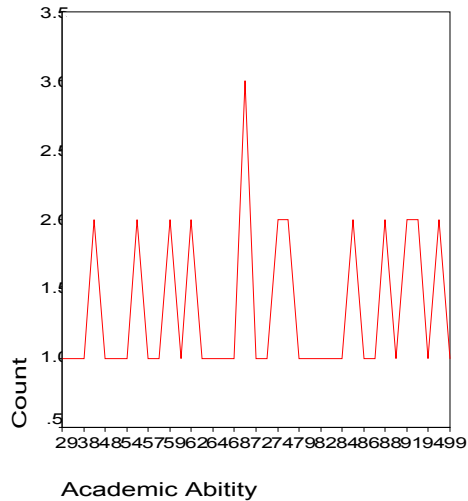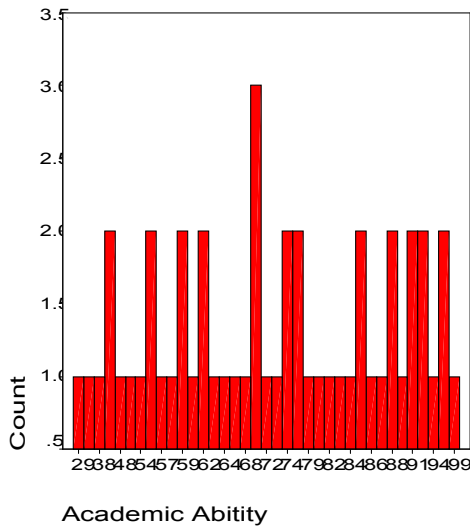

FIG 6

FIG 7

FIG 8

Tips for Task 3

*From the **Analyze** pull-down menu, select **Descriptive Statistics** and then **Frequencies** dialog box. Select only variable "student motivation" and send to the variable box, then click on **chart** button. In the dialog box, select **bar charts** as the chart type and **percentage** as the chart values. Then click the **continue** button to return to the previous dialog box. Finally, click the **OK** button to run the analysis to draw the chart (see Fig 11, 12, and 13)*
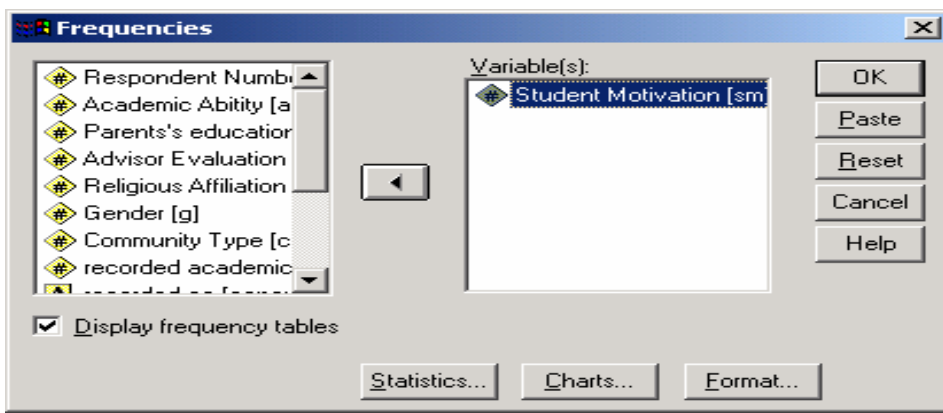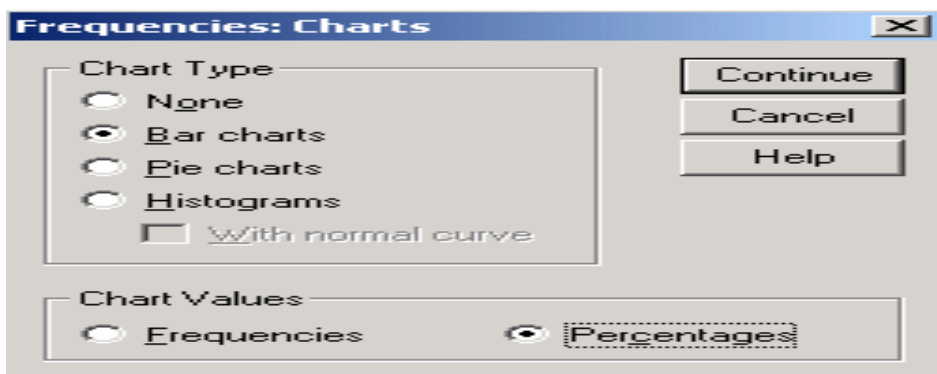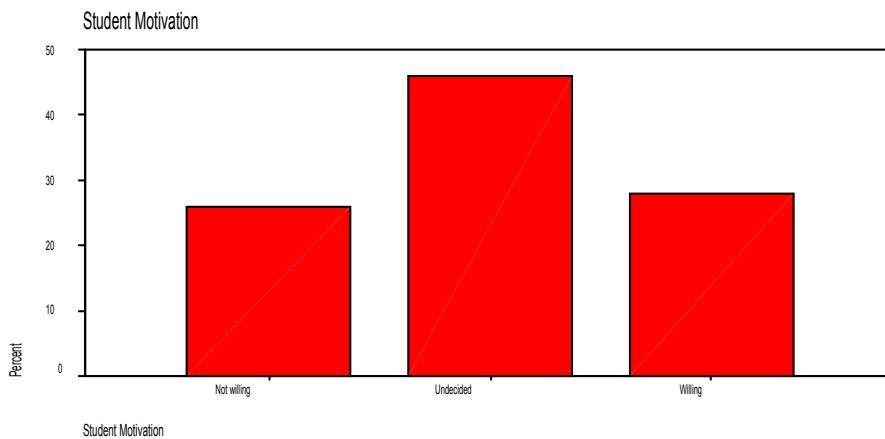

FIG 11

FIG 12

FIG 13

Tips for Task 4

Double-click the chart to enter the "chart editor window. There are many things you can do with your chart once you are in this window. Let's change the color. Use your mouse to double-click on the bars.