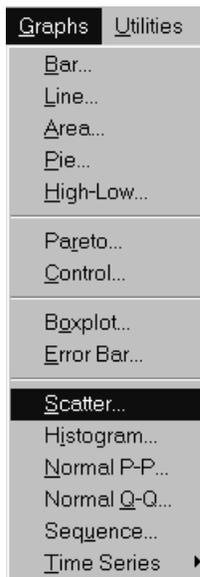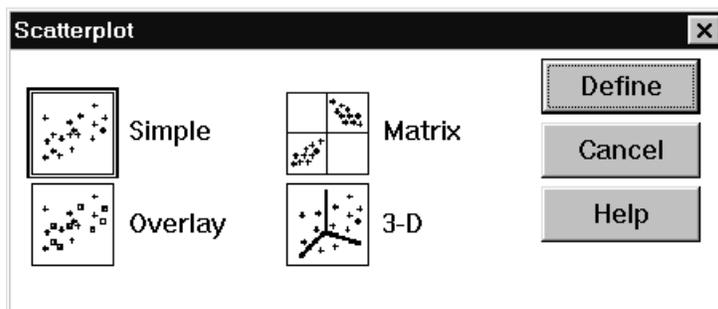# SEX DISCRIMINATION PROBLEM

11. Displaying Relationships in SPSS

Before we will apply linear regression methods to the sex discrimination data, it is important to examine the relationships between the relevant variables with scatterplots. Moreover, scatterplots are also used to detect any departures from the multiple linear regression model.
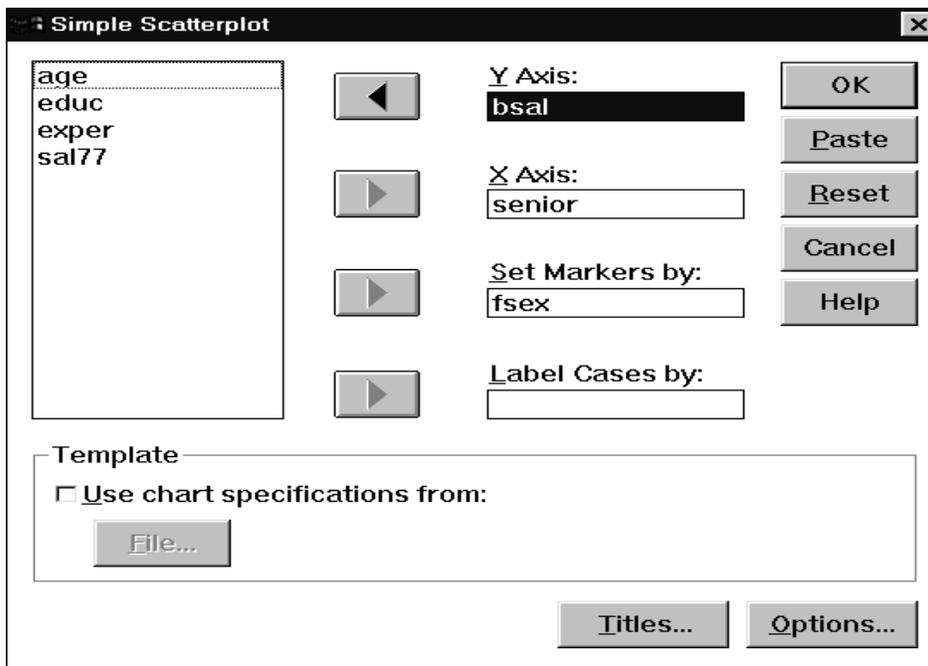
In this section, we will demonstrate how to obtain a scatterplot of beginning salaries versus seniority for each gender group. Other scatterplots can be obtained analogously. In order to access the feature in SPSS, click on *Graphs* in the main menu. The following submenu opens:

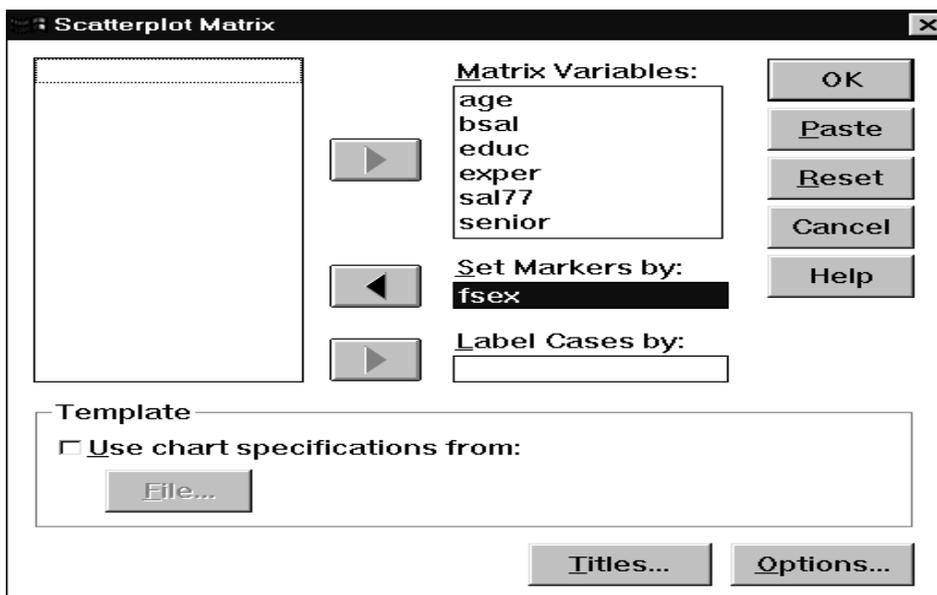After clicking on *Scatter...* you will obtain the following dialog box:

In order to obtain a scatterplot of beginning salaries versus seniority for each gender group, choose *Simple* in the box. The dialog box displayed should be filled out as follows:

Click on OK to obtain a scatterplot of beginning salary versus seniority with different marking symbols for male and female subjects. The scatterplots of log-transformed beginning salaries versus the independent variables for the sex discrimination data are displayed in **Section 5**.

One way to visualize data with more than two variables is the scatterplot matrix. Scatterplot matrix is a grid of several scatterplots showing the relationship between all the pairs of variables in the selection. In order to obtain a scatterplot matrix choose *Matrix* in the *Scatterplot* dialog box. Fill out the obtained dialog box as follows:

You will obtain the scatterplot displayed in **Section 6**.