SEX DISCRIMINATION PROBLEM

13. Displaying Relationships using Scatterplots

You have already practised how to obtain scatterplots using SPSS in the *Charts* section of the *Introduction to SPSS for Windows* module. Here we will add some new features and focus on obtaining scatterplot matrices and 3-D scatterplots.

When the data consist of several groups such as males and females in our data set, scatterplots that show which values belong to one group (males) and which belong to the other (females) can be very helpful.

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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:

Simple Scatterplot			×	
age educ exper		<u>Y</u> Axis: bsal	OK Paste	
sal77		X Axis:	Reset	
		<u>S</u> et Markers by: fsex	Cancel Help	
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Click on OK to obtain a scatterplot displayed in Section 6.1.

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:

Scatterplot Matrix		×		
	<u>Matrix Variables:</u> age bsal educ exper sal77 senior <u>Set Markers by:</u> fsex Label Cases by:	OK Paste Reset Cancel Help		
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You will obtain the scatterplot displayed in Section 6.7.

To obtain a 3-D scatterplot, select 3-D in the Scatterplot dialog box and click *Define*. This opens the *3-D Scatterplot* dialog box, as shown below. The specifications should be entered as follows:

3-D Scatterplot			>
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sal77		X Axis: senior	<u>P</u> aste <u>R</u> eset
		<u>Z</u> Axis: exper	Cancel Help
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The obtained plot can be viewed in **Section 6.8**.