

Answers to Exercise 3.5 (p. 90)

First of all, check to see that you have weighted your dataset with the variable 's1weight' (see Figure 2.5 on p. 52 for how to do this). Once this has been done, use the **Data** → **Split File...** procedure to organize your output by the variable 's1gender'. Once you have done this use **Analyze** → **Descriptive Statistics** → **Descriptives...** to provide summary statistics for the variable 'gcsepts'. The output you get should include the following two tables:

Descriptive Statistics^a

	N	Minimum	Maximum	Mean	Std. Deviation
Year 11 GCSE/GNVQ points score	6666	.0	109.0	40.453	20.9271
Valid N (listwise)	6666				

a. S1 Gender = Male

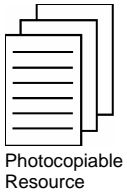
Descriptive Statistics^a

	N	Minimum	Maximum	Mean	Std. Deviation
Year 11 GCSE/GNVQ points score	6513	.0	117.0	45.533	20.3076
Valid N (listwise)	6513				

a. S1 Gender = Female

As can be seen, the mean GCSE score for girls (45.5) is higher than that for boys (40.5). However, both groups tend to have a fairly large spread of scores as indicated by their standard deviations (20.3 and 20.9 respectively). This suggests that there is considerable overlap in the distributions of scores between boys and girls.

To illustrate the extent of the overlap, reset the **Split File...** procedure first and then use **Graphs** → **Legacy Dialogs** → **Populations Pyramid...** as illustrated overleaf. Doing this should give you the population pyramid also shown overleaf. As can be seen, while the summary statistics indicate that girls are doing better than boys on average, the population pyramid shows that there remains considerable overlap between the two groups. As such it provides a very useful reminder of the dangers of generalizing too much from simple summary statistics.



Photocopiable Resource

Define Population Pyramid

Counts

Compute counts from data
 Get counts from variable

Variable:

Show Distribution over:

Split by:

Panel by

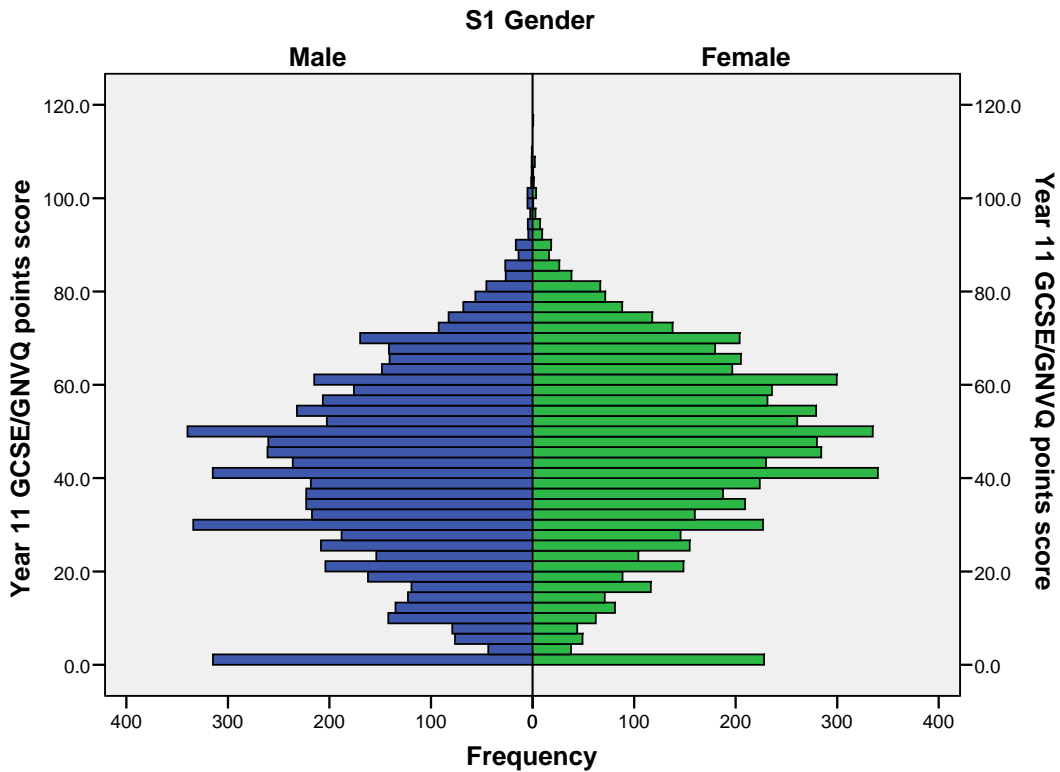
Rows:

Nest row variables

Template

Use chart specifications from:

OK
Paste
Reset
Cancel
Help
Titles...
Scale Options...



Case weight by Final weight for sweep 1 (rev June 06)