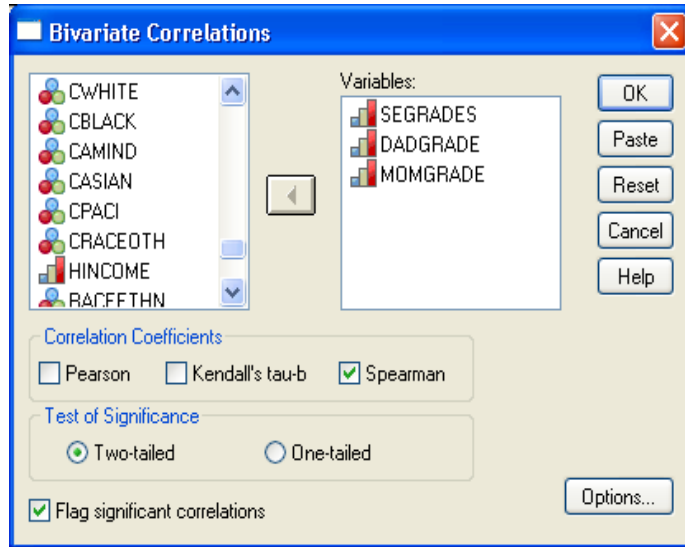


### Answers to Exercise 3.6 (p. 96)

First of all, check to see that you have weighted your dataset with the variable 'WTCORRCT' (see Figure 2.5 on p. 52 for how to do this). Also, check that you have re-defined the value '6' for 'SEGRADES' as missing (see p. 93 for explanation). Once this has been done, you can then use **Analyze** → **Correlate** → **Bivariate...** to calculate a spearman correlation coefficient between the three variables – 'SEGRADES', 'DADGRADE' and 'MOMGRADE' all at once as shown below:



Doing this should give you the output below. As can be seen, the correlation between a father's educational achievement and the child's school grades ( $r_s = -0.256$ ) is very similar for that between the mother and child ( $r_s = -0.240$ ) as found earlier. Also, it can be seen that there is a moderately strong correlation between the educational attainment of mothers and fathers ( $r_s = 0.620$ ).

Correlations

|                |  |                         | SE1-CHILD'S GRADES ACROSS ALL SUBJECTS | PV6-HIGHEST GRADE/YR SCH DAD COMPLETED | PU6-HIGHEST GRADE/YR MOM COMPLETED |
|----------------|--|-------------------------|--|--|------------------------------------|
| Spearman's rho | SE1-CHILD'S GRADES ACROSS ALL SUBJECTS | Correlation Coefficient | 1.000                                  | -.256**                                | -.240**                            |
|                |  | Sig. (2-tailed)         | .                                      | .000                                   | .000                               |
|                |  | N                       | 3029                                   | 2276                                   | 2893                               |
|                | PV6-HIGHEST GRADE/YR SCH DAD COMPLETED | Correlation Coefficient | -.256**                                | 1.000                                  | .620**                             |
|                |  | Sig. (2-tailed)         | .000                                   | .                                      | .000                               |
|                |  | N                       | 2276                                   | 3517                                   | 3338                               |
|                | PU6-HIGHEST GRADE/YR MOM COMPLETED     | Correlation Coefficient | -.240**                                | .620**                                 | 1.000                              |
|                |  | Sig. (2-tailed)         | .000                                   | .000                                   | .                                  |
|                |  | N                       | 2893                                   | 3338                                   | 4418                               |

\*\* Correlation is significant at the 0.01 level (2-tailed).