

Exercise 6 Correlation.

These exercises have been prepared for use in conjunction with Chapter 6 of the 4th edition of “SPSS for Psychologists” by Brace, Kemp and Snelgar (2009)

This exercise uses the data file **Employee data.sav** which we corrected as part of Exercise 5. Load the corrected file now.

1. Is there any evidence of a correlation between starting salary and current salary? What is the magnitude and direction of the correlation and is it statistically significant? What does this tell us?
2. Draw a scattergram to illustrate the relationship between starting salary and current salary. Add a regression line to the scattergram.
3. What percentage of the variance in current salary is explained by starting salary?
4. Produce a correlation matrix showing the correlations between the following variables: beginning salary, current salary, time in the job, previous experience.
5. Examine the correlation matrix and identify which of these correlations are statistically significant.
6. Which two variables are significantly negatively correlated? Can you suggest possible reasons for this relationship?
7. An organisational Psychologist wants to know whether there is a relationship between education and current salary. What is the most appropriate statistical test to use for this analysis? Justify your answer. Is the correlation significant?