**Chapter 11**

**ANCOVA**

The Theories.csv file examines sociology professors' attitudes to the major sociological paradigms: Structural Functionalism, Symbolic Interactionism and Conflict Theory. The average teaching input time is one scale. The others are perceived relevance of each paradigm of the following areas of study: the Environment, Family, and Class. (This study is a fictional one, as usual, based on the Iris data set.)

We are interested in whether or not different amounts of teaching time are allocated to the different theories. Let us assume that the researchers consider the Environment to be rather a cause of confusion in theoretical terms, and would like to have the 'Environment' data taken into consideration as a potential cause of noise.

Check the assumptions before reporting the results but for simplicity, report the results 'as is' even though some assumptions may be violated. No data transformation will be conducted.

State the null and alternative hypotheses:

What do the assumption results show?

What do the ANCOVA results show?

What is the result of a post-hoc test to identify significant differences among therapies?