Learning objectives

After studying this chapter and doing the exercises, you should be able to construct and interpret a number of different types of tabular and graphical summaries of data.

1. For single qualitative variables: frequency, relative frequency and percentage frequency distributions; bar charts and pie charts.
2. For single quantitative variables: frequency, relative frequency and percentage frequency distributions; cumulative frequency, relative cumulative frequency and percentage cumulative frequency distributions; dot plots, stem-and-leaf plots, histograms and ogives.
3. For pairs of qualitative and quantitative data: cross-tabulations, with row and column percentages.
4. For pairs of quantitative variables: scatter diagrams.
5. You should be able to give an example of Simpson's paradox and explain the relevance of this paradox to the cross-tabulation of variables.