CHAPTER OVERVIEW

10: Correlation and Regression

Our interest in this chapter is in situations in which we can associate to each element of a population or sample two measurements x and y, particularly in the case that it is of interest to use the value of x to predict the value of y. For example, the population could be the air in automobile garages, x could be the electrical current produced by an electrochemical reaction taking place in a carbon monoxide meter, and y the concentration of carbon monoxide in the air. In this chapter we will learn statistical methods for analyzing the relationship between variables x and y in this context.