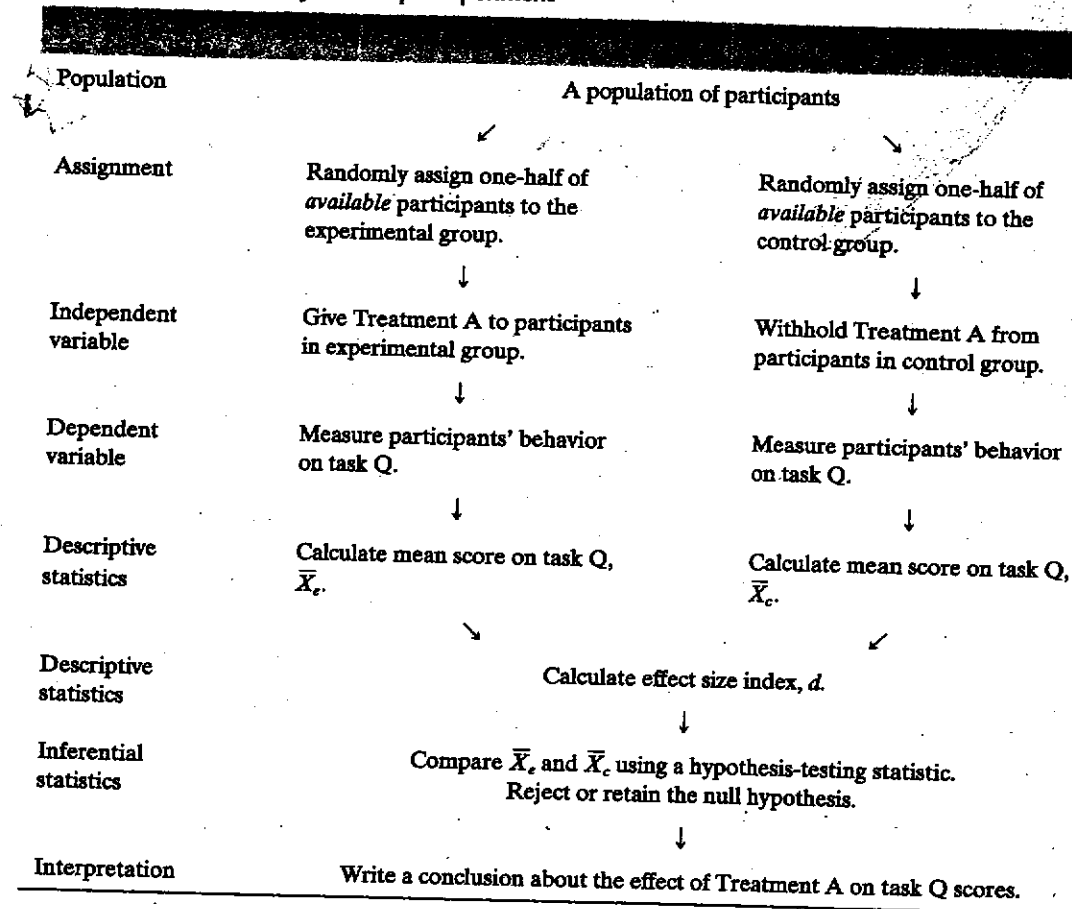


TABLE 9.1 Summary of a Simple Experiment



The experimental procedure is a versatile one. Experiments have been used to decide a wide variety of issues such as how much sugar to use in a cake recipe, what kind of tea tastes the best, whether a drug is useful in treating cancer, and the effect of alcoholic parents on the personality of their children.

In many experiments, it is obvious that there are *two* populations of participants to begin with — for example, a population of men and a population of women. The question, however, is whether they are equal on the dependent variable.

In some experimental designs, participants are randomly assigned to treatments by the researcher; in others, the researcher uses a group of participants who have already been “treated” (for example, being males or being children of alcoholic parents). In either of these designs, the methods of inferential statistics are the same, although the interpretation of the first kind of experiment is usually less open to attack.²