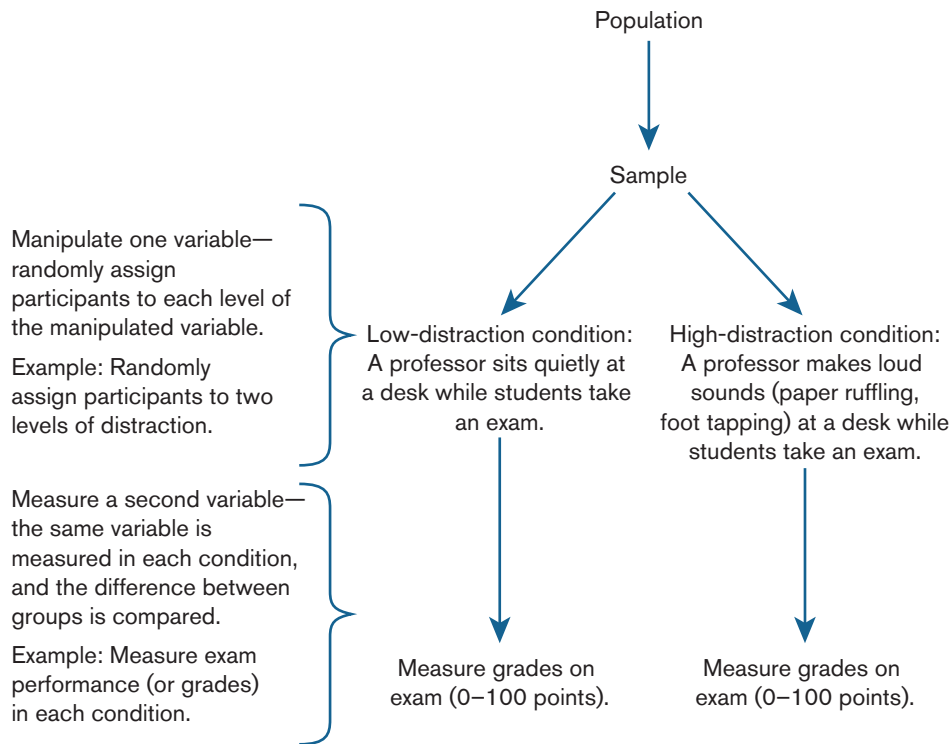


FIGURE 1.3 The Basic Structure of an Experiment



The basic structure of an experiment that meets each basic requirement for demonstrating cause and effect using an example of a study in which a sample of students was selected at random from a population of all undergraduates to test the effects of a distraction on exam performance. To qualify as an experiment, (1) the researcher created each level of distraction (manipulation), (2) students were randomly assigned to experience a low- or high-distraction condition while taking an exam (randomization), and (3) a comparison group was included where distraction was minimal or absent (comparison/control).