Confounding Variables. Sometimes, our results can be explained by a variable we neglected to control. In science, such a variable is called a confounding variable or confound. One type of confound occurs when a variable systematically changes along with the independent variable. For example, if we gave the alcohol to the participants in the evening and the soda pop to the participants in the morning, time of day, rather than alcohol consumption, could explain our findings. This type of confound is generally easy to eliminate by making sure that the only difference between the two experimental conditions is the independent variable.

A more serious confound occurs when an unintended consequence of the independent variable influences the dependent variable. To illustrate, imagine that a researcher hypothesizes that people in a good mood are more willing to donate money to a charitable cause than are people in a bad mood. To test this hypothesis, the researcher creates a good mood in some participants by giving them a small gift; other participants do not receive a gift. All participants are then given the opportunity to donate money to a charitable cause. Suppose the researcher finds that those who received the gift were more charitable than those who did not receive the gift. Can we be sure that good moods increase helping? Not necessarily. Receiving a gift may have more than one effect. In addition to making a person feel happy, it might also lead a person to feel obligated to do something nice for someone else. In this case, feelings of obligation represent a potential confound. The effects the researcher attributes to good mood may instead be due to increased feelings of obligation.

The researcher might avoid the possibility of a confound by conducting additional research that induces moods in a variety of ways. He or she might, for example, use pleasant music, agreeable fragrances, humor, and other means of making people happy. If all of these experimental manipulations affect helping behavior in a similar manner, we are confident that good moods affect helping behavior. (Research has, in fact, shown such an effect, and we will discuss this research in Chapter 12.)

D. Where We Conduct Research

Having decided what kind of research to conduct, we must decide where the research is going to be performed. Here we have two choices: the laboratory or the field. A