## Table 1.3 Research Methods in Psychology: Their Advantages and Disadvantages

Method	Advantages	Disadvantages
Case study	Good source of hypotheses. Provides in-depth information on individuals. Unusual cases can shed light on situations or problems that are unethical or impractical to study in other ways.	Vital information may be missing, making the case hard to interpret. The person's memories may be selective or inaccurate. The individual may not be representative or typical.
Naturalistic observation	Allows description of behavior as it occurs in the natural environment. Often useful in first stages of a research program.	Allows researcher little or no control of the situation. Observations may be biased. Does not allow firm conclusions about cause and effect.
Laboratory observation	Allows more control than naturalistic observation. Allows use of sophisticated equipment.	Allows researcher only limited control of the situation. Observations may be biased. Does not allow firm conclusions about cause and effect. Behavior may differ from behavior in the natural environment.
Test	Yields information on personality traits, emotional states, aptitudes, abilities.	Difficult to construct tests that are reliable and valid.
Survey	Provides a large amount of information on large numbers of people.	If sample is nonrepresentative or biased, it may be impossible to generalize from the results.  Responses may be inaccurate or untrue.
Correlational study	Shows whether two or more variables are related. Allows general predictions.	Does not permit identification of cause and effect.
Experiment	Allows researcher to control the situation. Permits researcher to identify cause and effect, and to distinguish placebo effects from treatment effects.	Situation is artificial, and results may not generalize well to the real world. Sometimes difficult to avoid experimenter effects.