

# Module 8

## Frequently Asked Questions About Psychology

### Module Learning Objectives

- 8-1** Explain the value of simplified laboratory conditions in illuminating everyday life.
- 8-2** Discuss whether psychological research can be generalized across cultures and genders.
- 8-3** Explain why psychologists study animals, and describe the ethical guidelines that safeguard animal research participants.
- 8-4** Describe the ethical guidelines that safeguard human research participants.
- 8-5** Examine whether psychology is free of value judgments.



We have reflected on how a scientific approach can restrain biases. We have seen how case studies, naturalistic observations, and surveys help us describe behavior. We have also noted that correlational studies assess the association between two variables, which indicates how well one thing predicts another. We have examined the logic that underlies experiments, which use control conditions and random assignment of participants to isolate the effects of an independent variable on a dependent variable. And we have considered how statistical tools can help us see and interpret the world around us.

Yet, even knowing this much, you may still be approaching psychology with a mixture of curiosity and apprehension. So before we plunge in, let's entertain some frequently asked questions.

### Psychology Applied

#### **8-1** Can laboratory experiments illuminate everyday life?

When you see or hear about psychological research, do you ever wonder whether people's behavior in the lab will predict their behavior in real life? For example, does detecting the blink of a faint red light in a dark room have anything useful to say about flying a plane at night? If, after playing violent video games in the lab, teens become more willing to push buttons that they think electrically shock someone, does this indicate that playing shooter games makes someone more likely to commit violence in everyday life?

Before you answer, consider: The experimenter *intends* the laboratory environment to be a simplified reality—one that simulates and controls important features of everyday life. Just as a wind tunnel lets airplane designers re-create airflow forces under controlled conditions, a laboratory experiment lets psychologists re-create psychological forces under controlled conditions.

An experiment's purpose is not to re-create the exact behaviors of everyday life but to test *theoretical principles* (Mook, 1983). In aggression studies, deciding whether to push a button that delivers a shock may not be the same as slapping someone in the face, but the principle is the same. *It is the resulting principles—not the specific findings—that help explain everyday behaviors.*

When psychologists apply laboratory research on aggression to actual violence, they are applying theoretical principles of aggressive behavior, principles they have refined through many experiments. Similarly, it is the principles of the visual system, developed from experiments in artificial settings (such as looking at red lights in the dark), that researchers apply to more complex behaviors such as night flying. And many investigations show that principles derived in the laboratory do typically generalize to the everyday world (Anderson et al., 1999).

*The point to remember:* Psychological science focuses less on particular behaviors than on seeking general principles that help explain many behaviors. And remember: Although psychological principles may help predict behaviors for groups of people, they minimally predict behavior for any individual. Knowing students' grade level may clue us to their average vocabulary level, but individual students' word power will vary.

#### **8-2** Does behavior depend on one's culture and gender?

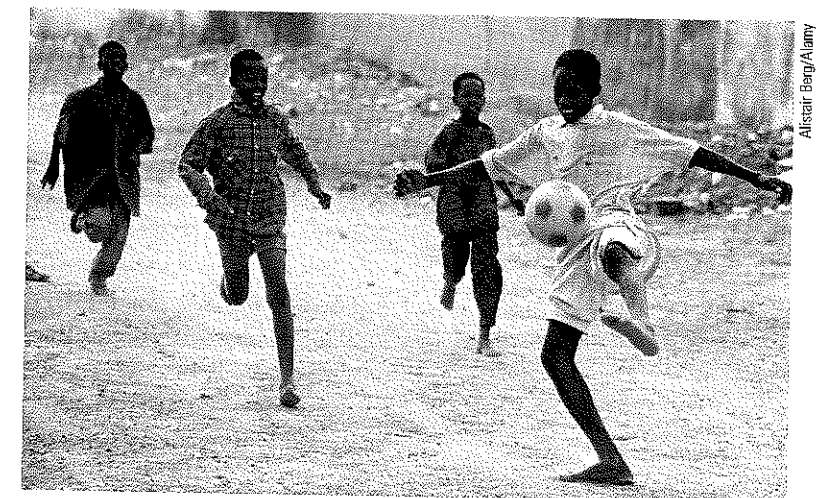
What can psychological studies done in one time and place—often with people from what researchers call the WEIRD (*Western, Educated, Industrialized, Rich, and Democratic*) cultures (Henrich et al., 2010) really tell us about people in general? As we will see time and again, **culture**—shared ideas and behaviors that one generation passes on to the next—matters. Our culture shapes our behavior. It influences our standards of promptness and frankness, our attitudes toward premarital sex and varying body shapes, our tendency to be casual or formal, our willingness to make eye contact, our conversational distance, and much, much more. *Collectivist* cultures, for example, emphasize group goals, while *individualist* cultures put a priority on individual goals. Being aware of such differences, we can restrain our assumptions that others will think and act as we do. Given the growing mixing and clashing of cultures, our need for such awareness is urgent.

It is also true, however, that our shared biological heritage unites us as a universal human family. The same underlying processes guide people everywhere.

- People diagnosed with specific learning disorder (formerly called dyslexia) exhibit the same brain malfunction whether they are Italian, French, or British (Paulesu et al., 2001).
- Variation in languages may impede communication across cultures. Yet all languages share deep principles of grammar, and people from opposite hemispheres can communicate with a smile or a frown.
- People in different cultures vary in feelings of loneliness. But across cultures, loneliness is magnified by shyness, low self-esteem, and being unmarried (Jones et al., 1985; Rokach et al., 2002).

**culture** the enduring behaviors, ideas, attitudes, values, and traditions shared by a group of people and transmitted from one generation to the next.

Soccer shoes? Because culture shapes social behavior, actions that seem ordinary to some may seem odd to others. Yet underlying these differences are powerful similarities. Children everywhere love to play sports such as soccer. But many American children would only play with athletic shoes on a field, not barefoot in the street, as do these Burkina Faso boys.



We are each in certain respects like all others, like some others, and like no other. Studying people of all races and cultures helps us discern our similarities and our differences, our human kinship and our diversity.

You will see throughout this book that *gender* matters, too. Researchers report gender differences in what we dream, in how we express and detect emotions, and in our risk for alcohol use disorder, depression, and eating disorders. Gender differences fascinate us, and studying them is potentially beneficial. For example, many researchers believe that women carry on conversations more readily to build relationships, while men talk more to give information and advice (Tannen, 2001). Knowing this difference can help us prevent conflicts and misunderstandings in everyday relationships.

But again, psychologically as well as biologically, women and men are overwhelmingly similar. Whether female or male, we learn to walk at about the same age. We experience the same sensations of light and sound. We feel the same pangs of hunger, desire, and fear. We exhibit similar overall intelligence and well-being.

*The point to remember:* Even when specific attitudes and behaviors vary by gender or across cultures, as they often do, the underlying processes are much the same.

"All people are the same; only their habits differ." -CONFUCIUS, 551-479 B.C.E.

## Ethics in Research

### 8-3 Why do psychologists study animals, and is it ethical to experiment on animals?

Many psychologists study animals because they find them fascinating. They want to understand how different species learn, think, and behave. Psychologists also study animals to learn about people. We humans are not *like* animals, we *are* animals, sharing a common biology. Animal experiments have therefore led to treatments for human diseases—insulin for diabetes, vaccines to prevent polio and rabies, transplants to replace defective organs.

Humans are complex. But the same processes by which we learn are present in rats, monkeys, and even sea slugs. The simplicity of the sea slug's nervous system is precisely what makes it so revealing of the neural mechanisms of learning. Sharing such similarities, should we not respect our animal relatives? "We cannot defend our scientific work with animals on the basis of the similarities between them and ourselves and then defend it morally on the basis of differences," noted Roger Ulrich (1991). The animal protection movement protests the use of animals in psychological, biological, and medical research. Researchers remind us that the animals used worldwide each year in research are but a fraction of 1 percent of the billions of animals killed annually for food. And yearly, for every dog or cat used in an experiment and cared for under humane regulations, 50 others are killed in humane animal shelters (Goodwin & Morrison, 1999).

Some animal protection organizations want to replace experiments on animals with naturalistic observation. Many animal researchers respond that this is not a question of good versus evil but of compassion for animals versus compassion for people. How many of us would have attacked Louis Pasteur's experiments with rabies, which caused some dogs to suffer but led to a vaccine that spared millions of people (and dogs) from agonizing death? And would we really wish to have deprived ourselves of the animal research that led to effective methods of training children with mental disorders, of understanding aging, and of relieving fears and depression? The answers to such questions vary by culture. In Gallup surveys in Canada and the United States, about 60 percent of adults deem medical testing on animals "morally acceptable." In Britain, only 37 percent do (Mason, 2003).

Out of this heated debate, two issues emerge. The basic one is whether it is right to place the well-being of humans above that of animals. In experiments on stress and cancer, is it right that mice get tumors in the hope that people might not? Should some monkeys be

"Please do not forget those of us who suffer from incurable diseases or disabilities who hope for a cure through research that requires the use of animals."  
-PSYCHOLOGIST DENNIS FEENEY (1987)

"Rats are very similar to humans except that they are not stupid enough to purchase lottery tickets." -DAVE BARRY, JULY 2, 2002

exposed to an HIV-like virus in the search for an AIDS vaccine? Is our use and consumption of other animals as natural as the behavior of carnivorous hawks, cats, and whales? Defenders of research on animals argue that anyone who has eaten a hamburger, worn leather shoes, tolerated hunting and fishing, or supported the extermination of crop-destroying or plague-carrying pests has already agreed that, *yes*, it is sometimes permissible to sacrifice animals for the sake of human well-being.

Scott Plous (1993) notes, however, that our compassion for animals varies, as does our compassion for people—based on their perceived similarity to us. As Module 79 explains, we feel more attraction, give more help, and act less aggressively toward similar others. Likewise, we value animals according to their perceived kinship with us. Thus, primates and companion pets get top priority. (Western people raise or trap mink and foxes for their fur, but not dogs or cats.) Other mammals occupy the second rung on the privilege ladder, followed by birds, fish, and reptiles on the third rung, with insects at the bottom. In deciding which animals have rights, we each draw our own cut-off line somewhere across the animal kingdom.

If we give human life first priority, what safeguards should protect the well-being of animals in research? One survey of animal researchers gave an answer. Some 98 percent supported government regulations protecting primates, dogs, and cats, and 74 percent supported regulations providing for the humane care of rats and mice (Plous & Herzog, 2000). Many professional associations and funding agencies already have such guidelines. British Psychological Society guidelines call for housing animals under reasonably natural living conditions, with companions for social animals (Lea, 2000). American Psychological Association (APA) guidelines state that researchers must ensure the "comfort, health, and humane treatment" of animals and minimize "infection, illness, and pain" (APA, 2002). The European Parliament now mandates standards for animal care and housing (Vogel, 2010).

Animals have themselves benefited from animal research. One Ohio team of research psychologists measured stress hormone levels in samples of millions of dogs brought each year to animal shelters. They devised handling and stroking methods to reduce stress and ease the dogs' transition to adoptive homes (Tuber et al., 1999). Other studies have helped improve care and management in animals' natural habitats. By revealing our behavioral kinship with animals and the remarkable intelligence of chimpanzees, gorillas, and other animals, experiments have also led to increased empathy and protection for them. At its best, a psychology concerned for humans and sensitive to animals serves the welfare of both.

"The greatness of a nation can be judged by the way its animals are treated." -MAHATMA GANDHI, 1869-1948



Animal research benefiting animals. Thanks partly to research on the benefits of novelty, control, and stimulation, these gorillas are enjoying an improved quality of life in New York's Bronx Zoo.

### 8-4 What ethical guidelines safeguard human participants?

Does the image of white-coated scientists delivering electric shocks trouble you? If so, you'll be relieved to know that most psychological studies are free of such stress. With people, blinking lights, flashing words, and pleasant social interactions are more common. Moreover, psychology's experiments are mild compared with the stress and humiliation often inflicted by reality TV shows. In one episode of *The Bachelor*, a man dumped his new fiancée—on camera, at the producers' request—for the woman who earlier had finished second (Collins, 2009).

Occasionally, though, researchers do temporarily stress or deceive people, but only when they believe it is essential to a justifiable end, such as understanding and controlling violent behavior or studying mood swings. Some experiments won't work if participants know everything beforehand. (Wanting to be helpful, the participants might try to confirm the researcher's predictions.)

Ethical principles developed by the American Psychological Association (2010), by the British Psychological Society (2009), and by psychologists internationally (Pettifor, 2004), urge researchers to (1) obtain potential participants' **informed consent**, (2) protect them from physical or emotional harm and discomfort, (3) keep information about individual participants confidential, and (4) fully **debrief** people (explain the research afterward). Moreover, most universities (where a great deal of research is conducted) now have an ethics committee—an Institutional Review Board (IRB)—that screens research proposals and safeguards participants' well-being.

The ideal is for a researcher to be sufficiently informative *and* considerate so that participants will leave feeling at least as good about themselves as when they came in. Better yet, they should be repaid by having learned something.

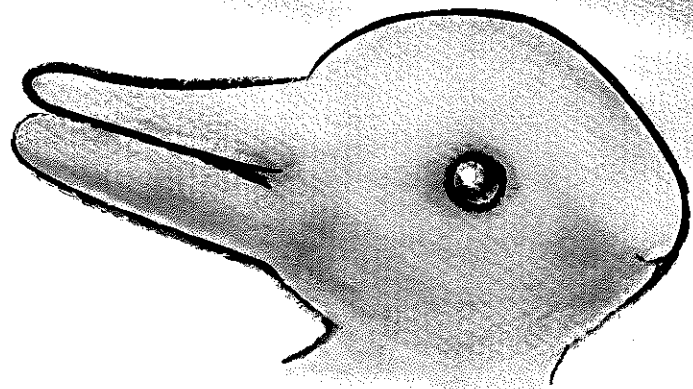
### 8-5 Is psychology free of value judgments?

Psychology is definitely not value-free. Values affect what we study, how we study it, and how we interpret results. Researchers' values influence their choice of topics. Should we study worker productivity or worker morale? Sex discrimination or gender differences? Conformity or independence? Values can also color "the facts." As we noted earlier, our preconceptions can bias our observations and interpretations; sometimes we see what we want or expect to see (**FIGURE 8.1**).

Even the words we use to describe something can reflect our values. In psychology and in everyday speech, labels describe and labels evaluate: One person's *rigidity* is another's *consistency*. One person's *faith* is another's *fanaticism*. One country's *enhanced interrogation techniques*, such as cold-water immersion, become *torture* when practiced by its enemies. Our labeling someone as *firm* or *stubborn*, *careful* or *picky*, *discreet* or *secretive* reveals our own attitudes.

Figure 8.1

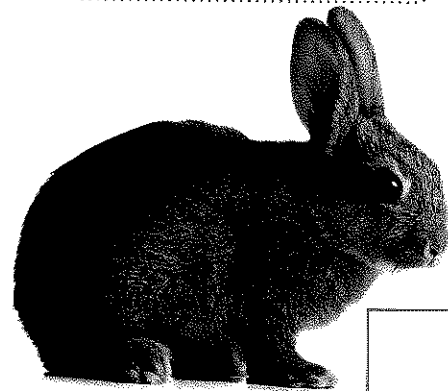
What do you see? Our expectations influence what we perceive. Did you see a duck or a rabbit? Show some friends this image with the rabbit photo above covered up and see if they are more likely to perceive a duck head instead. (From Shepard, 1990.)



**informed consent** an ethical principle that research participants be told enough to enable them to choose whether they wish to participate.

**debriefing** the postexperimental explanation of a study, including its purpose and any deceptions, to its participants.

"It is doubtless impossible to approach any human problem with a mind free from bias."  
—SIMONE DE BEAUVOIR, *THE SECOND SEX*, 1953



Mike Kemp/Getty Images

Popular applications of psychology also contain hidden values. If you defer to "professional" guidance about how to live—how to raise children, how to achieve self-fulfillment, what to do with sexual feelings, how to get ahead at work—you are accepting value-laden advice. A science of behavior and mental processes can help us reach our goals. But it cannot decide what those goals should be.

If some people see psychology as merely common sense, others have a different concern—that it is becoming dangerously powerful. Is it an accident that astronomy is the oldest science and psychology the youngest? To some, exploring the external universe seems far safer than exploring our own inner universe. Might psychology, they ask, be used to manipulate people?

Knowledge, like all power, can be used for good or evil. Nuclear power has been used to light up cities—and to demolish them. Persuasive power has been used to educate people—and to deceive them. Although psychology does indeed have the power to deceive, its purpose is to enlighten. Every day, psychologists are exploring ways to enhance learning, creativity, and compassion. Psychology speaks to many of our world's great problems—war, overpopulation, prejudice, family crises, crime—all of which involve attitudes and behaviors. Psychology also speaks to our deepest longings—for nourishment, for love, for happiness. Psychology cannot address all of life's great questions, but it speaks to some mighty important ones.



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**Psychology speaks** In making its historic 1954 school desegregation decision, the U.S. Supreme Court cited the expert testimony and research of psychologists Kenneth Clark and Mamie Phipps Clark (1947). The Clarks reported that, when given a choice between Black and White dolls, most African-American children chose the White doll, which seemingly indicated internalized anti-Black prejudice.

## Before You Move On

### ▶ ASK YOURSELF

Were any of this module's Frequently Asked Questions your questions? Do you have other questions or concerns about psychology?

### ▶ TEST YOURSELF

How are human and animal research participants protected?

Answers to the Test Yourself questions can be found in Appendix E at the end of the book.

## Module 8 Review

### 8-1 Can laboratory experiments illuminate everyday life?

- Researchers intentionally create a controlled, artificial environment in the laboratory in order to test general theoretical principles. These general principles help explain everyday behaviors.

### 8-2 Does behavior depend on one's culture and gender?

- Attitudes and behaviors may vary somewhat by gender or across *cultures*, but because of our shared human kinship, the underlying processes and principles are more similar than different.

### 8-3 Why do psychologists study animals, and is it ethical to experiment on animals?

- Some psychologists are primarily interested in animal behavior; others want to better understand the physiological and psychological processes shared by humans and other species.
- Government agencies have established standards for animal care and housing. Professional associations and funding agencies also establish guidelines for protecting animals' well-being.