

# Introducing Social Psychology

“**W**e cannot live for ourselves alone,” remarked the novelist Herman Melville, “for our lives are connected by a thousand invisible threads.” Social psychologists study those connections by scientifically exploring how we *think about, influence, and relate to* one another.

In the first two modules we explain how we do that exploring; how we play the social psychology game. As it happens, the ways we social psychologists form and test ideas can be carried into life itself, enabling us to think smarter as we analyze everyday social thinking, social influences, and social relations.

If intuition and common sense were utterly trustworthy, we would be less in need of scientific inquiry and critical thinking. But the truth, as Module 2 relates, is that whether we are reflecting on research results or everyday events we readily succumb to a powerful hindsight bias, also called the *I-knew-it-all-along phenomenon*.



# Methods in Social Psychology



Imagine yourself in the following situation. You have just returned home from a trip to Winnipeg, where you were visiting family. You get a call from the RCMP, who want to drop by to “ask you a few questions.” Being the innocent person that you are, you agree. Once the police arrive, they begin to question you about your trip and ask if you remember buying coffee at a donut shop before you left town. You reply, “Of course, I always need coffee before a long drive.” Before leaving, the police ask permission to take your picture. Again, you believe you are innocent of any crime and agree to be photographed.

Much to your surprise, three days later the police are back and you are arrested. You are taken to a Winnipeg police station where you are fingerprinted and put in a cell. Later you are subjected to a humiliating strip search, and then you are questioned for 13 hours. The police show you pictures of a horrific murder that occurred at the donut shop you visited. The teenager who worked there had been strangled and left for dead. The police have an eyewitness who saw you running from the scene of the crime. They tell you your fingerprints were found at the scene. Your alibi for the time of the murder is now saying she doesn’t remember seeing you that day. The police start to question your mental state. What would you do? Would you continue to deny your involvement? Would you confess and hope for a lenient sentence? Would you ask to see a lawyer? Would the police come to their senses and realize you are innocent? If someone else were in a similar situation and confessed, would you believe that they were guilty?

*Social psychologists scientifically explore how we think about, influence, and relate to one another. Which of your everyday social connections might be studied scientifically by a social psychologist?*



OLC

**Activity 1.1**

Implausible? This was Tom Sophonow's reality. He spent 4 years in prison for the murder of that Winnipeg teenager and another 16 years trying to clear his name. What would you have done in his situation? Many people believe that they would never confess to a crime they didn't commit, but doing so is much more likely than people imagine. Police are trained to create situations that encourage suspects to confess. This is very useful when suspects are actually criminals, but incredibly dangerous when suspects are innocent. Visit the Online Learning Centre to complete Activity 1.1 and learn more about this case.

The French philosopher-novelist Jean-Paul Sartre (1946) would have had no problem accepting this premise. We humans are "first of all beings in a situation," he believed. "We cannot be distinguished from our situations, for they form us and decide our possibilities" (pp. 59–60, paraphrased). Social psychology is a science that studies the influences of our situations, with special attention to how we view and affect one another. "Our lives are connected by a thousand invisible threads," said the novelist Herman Melville. Social psychology aims to illuminate those threads. It does so by asking questions that have intrigued us all:

- How and what do people *think* of one another? How reasonable are the ideas we form of ourselves? Of our friends? Of strangers? How tight are the links between what we think and what we do?
- How, and how much, do people *influence* one another? How strong are the invisible threads that pull us? Are we creatures of our gender roles? Our groups? Our cultures? How can we resist social pressure, or even sway the majority?
- What shapes the way we *relate to* one another? What leads people sometimes to hurt and sometimes to help? What kindles social conflict? And how might we transform the closed fists of aggression into the open arms of compassion?

A common thread runs through these questions: They all deal with how people view and affect one another. That is what the field of social psychology is all about: attitudes and beliefs, conformity and independence, love and hate. To put it formally, **social psychology** is *the scientific study of how people think about, influence, and relate to one another*.

Unlike other scientific disciplines, social psychology has more than 6 billion amateur practitioners. People-watching is a universal hobby—in parks, at school, and at the mall. As we observe people, we form ideas about how human beings think about, influence, and relate to one another. Professional social psychologists do the same, only more systematically (by forming theories) and painstakingly (often with experiments that create miniature social dramas that pin down cause and effect).

**Social psychology** The scientific study of how people think about, influence, and relate to one another.

## FORMING AND TESTING THEORIES

We social psychologists have a hard time thinking of anything more fascinating than human existence. If, as Socrates counselled, “The unexamined life is not worth living,” then simply “knowing thyself” seems a worthy enough goal.

As we wrestle with human nature to pin down its secrets, we organize our ideas and findings into theories. A **theory** is *an integrated set of principles that explain and predict* observed events. Theories are a scientific shorthand.

In everyday conversation, “theory” often means “less than fact”—a middle rung on a confidence ladder from guess to theory to fact. But to a scientist, facts and theories are apples and oranges. Facts are agreed-upon statements about what we observe. Theories are *ideas* that summarize and explain facts. “Science is built up with facts, as a house is with stones,” said Jules Henri Poincaré, “but a collection of facts is no more a science than a heap of stones is a house.”

Theories not only summarize—they also imply testable predictions, called **hypotheses**. Hypotheses serve several purposes. First, they allow us to test a theory by suggesting how we might try to falsify it. In making predictions, a theory puts its money where its mouth is. Second, predictions give *direction* to research. Any scientific field will mature more rapidly if its researchers have a sense of direction. Theoretical predictions suggest new areas for research; they send investigators looking for things they might never have thought of. Third, the predictive feature of good theories can also make them *practical*. A complete theory of aggression, for example, would predict when to expect aggression and how to control it. As Kurt Lewin, one of modern social psychology’s founders, declared, “There is nothing so practical as a good theory.”

Consider how this works. Say we observe that people sometimes explode violently when in crowds. We might therefore theorize that the presence of other people makes individuals feel anonymous and lowers their inhibitions. Let’s play with this idea for a moment. Perhaps we could test it by constructing a laboratory experiment simulating an execution by electric chair. What if we asked individuals in groups to administer punishing shocks to a hapless victim without knowing which one of the group was actually shocking the victim? Would these individuals administer stronger shocks than individuals acting alone, as our theory predicts?

We might also manipulate anonymity: Would people deliver stronger shocks hiding behind masks? If the results confirm our hypothesis, they might suggest some practical applications. Perhaps police brutality could be reduced by having officers wear large name tags and drive cars identified with large numbers, or by videotaping their arrests—all of which have, in fact, recently become common practice in many cities.

But how do we conclude that one theory is better than another? A good theory (1) effectively summarizes a wide range of observations; and (2) makes clear predictions that we can use to (a) confirm or modify the theory, (b) generate new exploration, and (c) suggest practical application. When we discard theories, usually it’s not because they have been proved false. Rather, like old cars, they get replaced by newer, better models.

**Theory** An integrated set of principles that explain and predict observed events.

**Hypothesis** A testable proposition that describes a relationship that might exist between events.

## CORRELATIONAL RESEARCH: DETECTING NATURAL ASSOCIATIONS

Most of what you will learn about social-psychological research methods you will absorb as you read later chapters. But let us go backstage now and take a brief look at how social psychology is done. This glimpse behind the scenes will be just enough for you to appreciate the findings discussed later and to think critically about everyday social events.

### Correlational research

The study of the naturally occurring relationships among the variables.

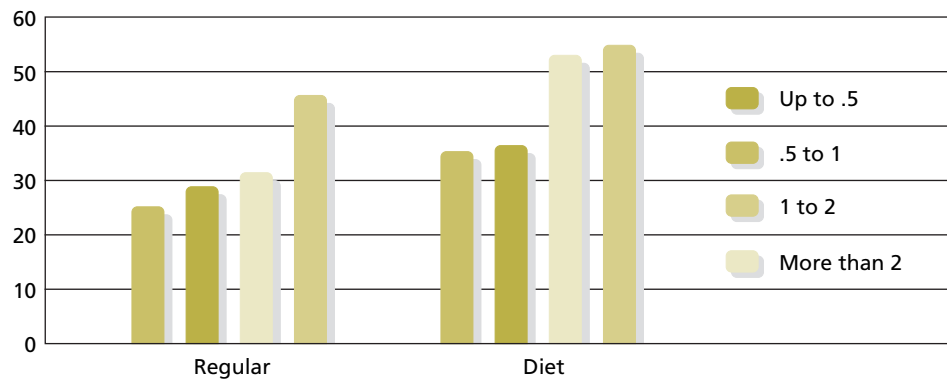
### Experimental research

Studies that seek clues to cause–effect relationships by manipulating one or more factors (independent variables) while controlling others (holding them constant).

Social-psychological research varies by location. It can take place in the *laboratory* (a controlled situation) or in the *field* (everyday situations). And it varies by method—**correlational research** asks whether two or more factors are naturally associated, and **experimental research** manipulates some factor to see its effect on another. If you want to be a critical reader of psychological research reported in newspapers and magazines, it pays to understand the difference between correlational and experimental research.

Using some real examples, let's first consider the advantages of correlational research (often involving important variables in natural settings) and the disadvantages (ambiguous interpretation of cause and effect). Today's psychologists relate personal and social factors to human health.

In June 2005 an article appeared in a number of news sources indicating that drinking diet soft drinks resulted in weight gain. Soft drink companies have long argued that weight-conscious consumers could help control their weight by drinking diet soft drinks instead of their original high-calorie, sugar-laced beverages. The study, conducted by Sharon Fowler and her colleagues (see Fowler & others, 2005), found that consuming soft drinks was correlated with obesity—the more you drink, the more likely you are to be obese. Given their high sugar content, perhaps this finding was not surprising. However, what surprised the researchers even more was that consuming *diet* soft drinks was *even more* strongly related to obesity rates.



**FIGURE 1-1**

Percentage risk of becoming overweight by type and amount of pop consumed.

Data from Fowler & others, 2005.

As shown in Figure 1-1, a person's risk of being clinically overweight or obese increased with the amount of soft drinks they drank per day. More surprisingly, we can see that the risk was higher in every consumption category for diet soda drinkers over regular soda drinkers. Why was this the case? Could it be that drinking diet soda causes weight to increase in people who drink it? Should obese people who drink diet soft drinks switch to regular in order to lose weight? What are some of the alternative explanations for this effect? Visit the Online Learning Centre and complete Activity 1.2 to learn more about this topic.



OLC  
Activity 1.2

## Correlation versus Causation

The diet cola–weight gain question illustrates the most irresistible thinking error made by both amateur and professional social psychologists: When two things go together, it is terribly tempting to conclude that one is causing the other. Correlations indicate a relationship. Correlational research therefore allows us to *predict*, but it cannot tell us whether changing one variable will *cause* changes in another.

The correlation–causation confusion is behind much muddled thinking in popular psychology. Consider another very real correlation—between self-esteem and academic achievement. Children with high self-esteem tend also to have high academic achievement. (As with any correlation, we can also state this the other way around: High achievers tend to have high self-esteem.) Why do you suppose this is (see Figure 1-2 on page 8)?

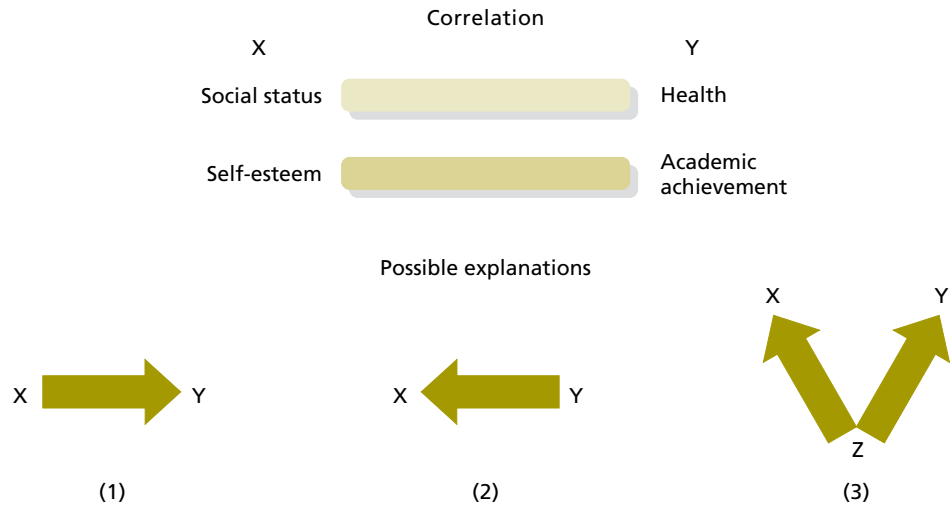
Some people believe a “healthy self-concept” contributes to achievement. Thus, boosting a child’s self-image may also boost school achievement. Believing so, 30 U.S. states have enacted more than 170 self-esteem–promoting statutes.

But others, including psychologists William Damon (1995), Robyn Dawes (1994), Mark Leary (1998), Martin Seligman (1994), and Roy Baumeister & others (2003), doubt that self-esteem is really “the armour that protects kids” from underachievement (or drug abuse and delinquency). Perhaps it’s the other way around: Perhaps problems and failures cause low self-esteem. Perhaps self-esteem often reflects the reality of how things are going for us. Perhaps self-esteem grows from hard-won achievements. Do well and you will feel good about yourself; goof off and fail and you will feel like a schmuck. A study of 635 Norwegian schoolchildren suggests that a string of gold stars beside one’s name on the spelling chart and constant praise from an admiring teacher can boost a child’s self-esteem (Skaalvik & Hagtvet, 1990). It’s also possible that self-esteem and achievement correlate because both are linked to underlying intelligence and family social status.

That possibility was raised in two studies—one a U.S. national sample of 1,600 young men, another of 715 Minnesota youngsters (Bachman & O’Malley, 1977; Maruyama & others, 1981). When the researchers statistically removed the effect of intelligence and family status, the correlation between self-esteem and achievement evaporated.

*This man is drinking diet soda in his bathrobe for breakfast.*





**FIGURE 1-2**  
When two variables correlate, any combination of three explanations is possible.

Advanced correlational techniques can suggest cause–effect relations, for example by statistically extracting the influence of “confounded” (extraneous but associated) variables. Thus, the researchers just mentioned saw the correlation between self–esteem and achievement evaporate after extracting differences in intelligence and family status. (Among people of similar intelligence and family status, the self–esteem–achievement relationship was minimal.)

So, the great strength of correlational research is that it tends to occur in real-world settings where we can examine factors such as race, sex, and social status that we cannot manipulate in the laboratory. Its great disadvantage lies in the ambiguity of the results. The point is so important that, even if it fails to impress people the first 25 times they hear it, it is worth making a 26th time: Knowing that two variables change together enables us to predict one when we know the other; but *correlation does not specify cause and effect*.

### EXPERIMENTAL RESEARCH: SEARCHING FOR CAUSE AND EFFECT

The near impossibility of discerning cause and effect among naturally correlated events prompts most social psychologists to create laboratory simulations of everyday processes whenever this is feasible and ethical. These simulations are roughly similar to aeronautical wind tunnels. Aeronautical engineers don’t begin by observing how flying objects perform in a wide variety of natural environments. The variations in both atmospheric conditions and flying objects are so complex that they would surely find it difficult to organize and use such data to design better aircraft. Instead, they construct a simulated reality that is under their control. Then they can manipulate wind conditions and observe the precise effect of particular wind conditions on particular wing structures.

## Control: Manipulating Variables

Like aeronautical engineers, social psychologists experiment by constructing social situations that simulate important features of our daily lives. By varying just one or two factors at a time—called **independent variables**—the experimenter pinpoints how changes in these one or two things affect us. As the wind tunnel helps the aeronautical engineer discover principles of aerodynamics, so the experiment enables the social psychologist to discover principles of social thinking, social influence, and social relations. The ultimate aim of wind tunnel simulations is to understand and predict the flying characteristics of complex aircraft. Social psychologists experiment to understand and predict complex human behaviours. They aim to understand why behaviour varies among people, across situations, and over time.

Social psychologists have used the experimental method in about three-fourths of their research studies (Higbee & others, 1982), and in two out of three studies the setting has been a research laboratory (Adair & others, 1985). To illustrate the laboratory experiment, consider an experiment that typifies a possible cause–effect explanation of correlational findings: the well-known correlation between television viewing and children’s behaviour. Children who watch many violent television programs tend to be more aggressive than those who watch few. This suggests that children might be learning from what they see on the screen. As we hope you now recognize, this is a correlational finding. Figure 1-3 on page 10 reminds us that there are two other cause–effect interpretations that do not implicate television as the cause of the children’s aggression. (What are they?)

Social psychologists have therefore brought television viewing into the laboratory, where they control the amount of violence the children see. By exposing children to violent and nonviolent programs, researchers can observe how the amount of violence affects behaviour. Chris Boyatzis and his colleagues (1995) showed some elementary schoolchildren, but not others, an episode of the 1990s’ most popular—and violent—children’s television program, *Power Rangers*. Immediately after viewing the episode, the viewers committed seven times as many aggressive acts per two-minute interval as the nonviewers. The observed aggressive acts we call the **dependent variable**. Such experiments indicate that television can be one cause of children’s aggressive behaviour. This research, as well as research that examines the link between playing violent video games and aggression, will be discussed in greater detail in a later module.

So far we have seen that the logic of experimentation is simple: By creating and controlling a miniature reality, we can vary one factor and then another and discover how these factors, separately or in combination, affect people. Now let’s go a little deeper and see how an experiment is done.

Every social-psychological experiment has two essential ingredients. We have just considered one—*control*. We manipulate one or two independent variables while trying to hold everything else constant. The other ingredient is *random assignment*.

### Independent variable

The experimental factor that a researcher manipulates.

**Dependent variable** The variable being measured, so-called because it may *depend* on manipulations of the independent variable.

## Random Assignment: The Great Equalizer

Recall that we were reluctant, on the basis of a correlation, to assume that viewing violence *causes* aggressiveness. A survey researcher might measure and statistically extract other possibly pertinent factors and see if the correlations survive. But one can never control for all the factors that might distinguish violence viewers from non-viewers. Maybe violence viewers differ in education, culture, intelligence—or in dozens of ways the researcher hasn't considered.

### Random assignment

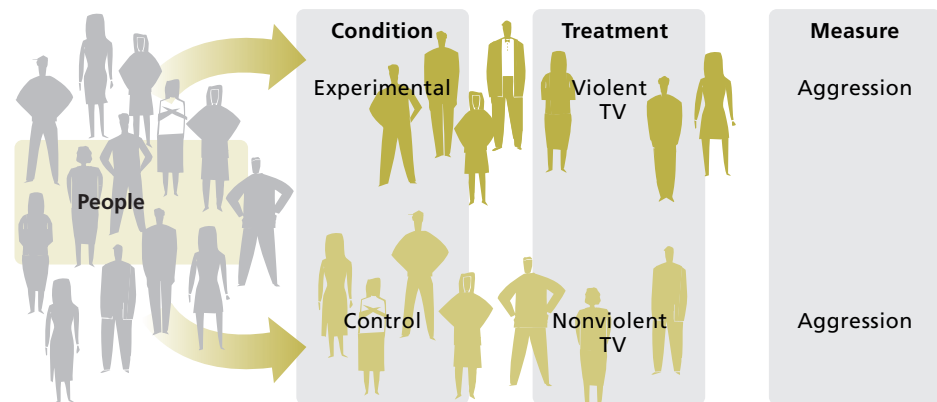
The process of assigning participants to the conditions of an experiment such that all persons have the same chance of being in a given condition. (Note the distinction between random assignment in experiments and random sampling in surveys. Random *assignment* helps us infer cause and effect. Random *sampling* helps us generalize to a population.)

In one fell swoop, **random assignment** eliminates all such extraneous factors. With random assignment, each person has an equal chance of viewing the violence or the nonviolence. Thus, the people in both groups would, in every conceivable way—family status, intelligence, education, initial aggressiveness—average about the same. Highly intelligent people, for example, are equally likely to appear in both groups. Because random assignment creates equivalent groups, any later aggression difference between the two groups must have something to do with the only way they differ—whether or not they viewed violence (Figure 1-3).

## The Ethics of Experimentation

Our television example illustrates why some experiments are ethically sensitive. Social psychologists would not, over long time periods, expose one group of children to brutal violence. Rather, they briefly alter people's social experience and note the effects. Sometimes the experimental treatment is a harmless, perhaps even enjoyable, experience to which people give their knowing consent. Sometimes, however, researchers find themselves operating in a grey area between the harmless and the risky.

Social psychologists often venture into that ethical grey area when they design experiments that engage intense thoughts and emotions. Experiments need not have what Elliot Aronson, Marilynn Brewer, and Merrill Carlsmith (1985) call



**FIGURE 1-3**

**Random assignment.** Experiments randomly assigning people either to a condition that receives the experimental treatment or to a control condition that does not. This gives the researcher confidence that any later difference is somehow caused by the treatment.

**mundane realism.** That is, laboratory behaviour (for example, delivering electric shocks as part of an experiment on aggression) need not be literally the same as everyday behaviour. For many researchers, that sort of realism is indeed mundane—not important. But the experiment *should* have **experimental realism**—it should absorb and involve the participants. Experimenters do not want their people consciously play-acting or ho-humming it; they want to engage real psychological processes. Forcing people to choose whether to give intense or mild electric shock to someone else can, for example, be a realistic measure of aggression. It functionally simulates real aggression.

Achieving experimental realism sometimes requires deceiving people with a plausible cover story. If the person in the next room actually is not receiving the shocks, the experimenter does not want the participants to know this. That would destroy the experimental realism. Thus, about one-third of social-psychological studies (though a decreasing number) have used deception in their search for truth (Korn & Nicks, 1993; Vitelli, 1988).

Researchers often walk a tightrope in designing experiments that will be involving yet ethical. To believe that you are hurting someone, or to be subjected to strong social pressure to see if it will change your opinion or behaviour, may be temporarily uncomfortable. Such experiments raise the age-old question of whether ends justify means. Do the insights gained justify deceiving and sometimes distressing people?

University research ethics boards now review all research that involves human participants. This includes issues such as medical research, as well as the type of research that is described in this book. In Canada, the three major federal granting councils have developed a Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans (see Tri-Council Policy Statement, 2005, available at [www.pre.ethics.gc.ca](http://www.pre.ethics.gc.ca)). Only those universities that certify compliance with this policy receive research funding from these agencies. Indeed, before any funding is released to researchers, they must prove they have ethical approval from their institution.

The Tri-Council Policy is based on some guiding ethical principles:

- Respect for human dignity
- Free and **informed consent** (that is, participants must know enough about what is being done in the study to make an informed decision)
- Concern for vulnerable persons (that is, people who cannot provide free and informed consent—for example, minors—must have appropriate representation—for example, parents or guardians)
- Privacy and confidentiality of any information collected from participants, and
- Justice and inclusiveness.

In addition, participants have the right to be completely debriefed at the end of any study and informed of its purpose. Finally, participants have the right to be told if they were deceived, and the reason for that deception.

The experimenter should be sufficiently informative *and* considerate so that people leave feeling at least as good about themselves as when they came in. Better yet, the participants should be repaid by having learned something about the nature of

### **Mundane realism**

The degree to which an experiment is superficially similar to everyday situations.

### **Experimental realism**

The degree to which an experiment absorbs and involves its participants.



### **OLC Activity 1.3**

**Informed consent** An ethical principle requiring that research participants be told enough to enable them to decide whether they wish to participate.

psychological inquiry. When treated respectfully, few participants mind being deceived (Epley & Huff, 1998; Kimmel, 1998). Indeed, say social psychology's defenders, professors evoke far greater anxiety and distress by giving and returning course exams than researchers now do in their experiments.

## GENERALIZING FROM LABORATORY TO LIFE

As the research on children, television, and violence illustrates, social psychology mixes everyday experience and laboratory analysis. Throughout this book we will do the same by drawing our data mostly from the laboratory and our illustrations mostly from life. Social psychology displays a healthy interplay between laboratory research and everyday life. Hunches gained from everyday experience often inspire laboratory research, which deepens our understanding of our experience.

This interplay appears in the children's television experiment. What people saw in everyday life suggested experimental research. Network and government policymakers—those with the power to make changes—are now aware of the results. The consistency of findings on television's effects—in the lab and in the field—is true of research in many other areas, including studies of helping, leadership style, depression,

## The Story Behind the Research

When Rod Lindsay was a graduate student at the University of Alberta in the late 1970s he met Gary Wells, a new faculty member who specialized in the accuracy of eyewitness identification. At the time, Lindsay did not know much about eyewitness identification research. However, together these researchers would eventually become two of the most recognized eyewitness researchers in the world. Lindsay and Wells preferred to enact their "crimes" live (other lab-based researchers frequently used videotapes or slide sequences to present staged crimes, leaving open the possibility that the research was not generalizable to the "real world" of live crimes).

Lindsay and Wells's participants were brought into a lab room and seated. The research assistant would then escort a second "participant" into the room and seat him or her nearer the door. After introducing the participants, the research assistant would

say she had to leave the room for a while. The second participant was actually a confederate of the experimenter. After engaging the participant in small talk, the confederate would suddenly "steal" something (for example a calculator or the research assistant's purse) and run out of the room.

Not surprisingly, this often left the participant shaken (as a real crime would). After the participant calmed down, he or she was asked to give a description of the criminal and to try to make an identification from a lineup. Dr. Lindsay's research typically found that witnesses in these "real" crimes were quite likely to make errors in their lineup identifications. More importantly, he began to test factors that affected eyewitness errors (poor instructions, poor lineup construction, sequential presentation) that eventually led to lineup procedures designed to reduce identification errors in the real world. |

and self-efficacy. The effects one finds in the lab have been mirrored by effects in the field. “The psychology laboratory has generally produced psychological truths rather than trivialities,” note Craig Anderson and his colleagues (1999).

We need to be cautious, however, in generalizing from laboratory to life. Although the laboratory uncovers basic dynamics of human existence, it is still a simplified, controlled reality. It tells us what effect to expect of variable *X*, all other things being equal—which, in real life, they never are. Moreover, as you will see, the participants in many experiments are post-secondary students. Although this may help you identify with them, students are hardly a random sample of all humanity. Would we get similar results with people of different ages, educational levels, and cultures? This is always an open question.

Nevertheless, we can distinguish between the *content* of people’s thinking and acting (their attitudes, for example) and the *process* by which they think and act (for example, how attitudes affect actions and vice versa). The content varies more from culture to culture than does the process. For example, Canadians and Americans have different views on a number of social issues (such as attitudes toward gay marriage; Bibby, 2004) and similar views on other topics (for example capital punishment; see Honeyman & Ogloff, 1996). However, even though Canadian and American attitudes can differ, *how* attitudes and behaviours change are likely to be the same. Our behaviours may differ, yet be influenced by the same social forces.

## CONCEPTS TO REMEMBER

**Social psychology** p. 4

**Theory** p. 5

**Hypothesis** p. 5

**Correlational research** p. 6

**Experimental research** p. 6

**Independent variable** p. 9

**Dependent variable** p. 9

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**Mundane realism** p. 11

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Please visit the *Exploring Social Psychology* Online Learning Centre at [www.mcgrawhill.ca/college/myers](http://www.mcgrawhill.ca/college/myers) to participate in module activities, view module videos, access research and study tools, and test your knowledge with interactive quizzes, exercises, and scenarios.