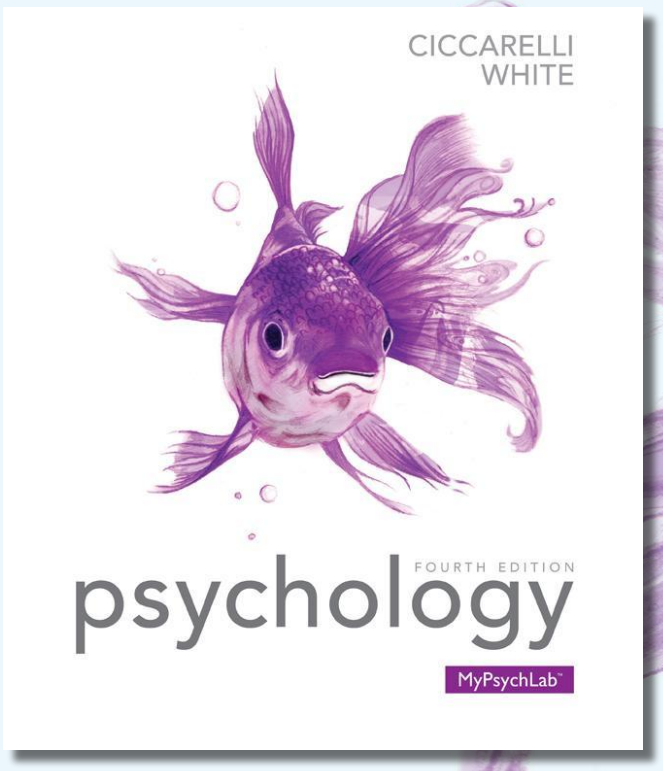

psychology

fourth edition

PEARSON

Psychology, Fourth Edition
Saundra K. Ciccarelli • J. Noland White

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Learning Objectives

1.1 What defines psychology as a field of study, and what are psychology's four primary goals?

1.2 How did structuralism and functionalism differ, and who were the important people in those early fields?

1.3 What were the basic ideas and who were the important people behind the early approaches known as Gestalt, psychoanalysis, and behaviorism?

1.4 What are the basic ideas behind the seven modern perspectives, and what were the important contributions of Skinner, Maslow, and Rogers?

1.5 How does a psychologist differ from a psychiatrist, and what are the other types of professionals who work in the various areas of psychology?

1.6 Why is psychology considered a science, and what are the steps in using the scientific method?

1.7 How are naturalistic and laboratory settings used to describe behavior, and what are some of the advantages and disadvantages associated with these settings?

1.8 How are case studies and surveys used to describe behavior, and what are some drawbacks to each of these methods?

1.9 What is the correlational technique, and what does it tell researchers about relationships?

1.10 How are operational definitions, independent and dependent variables, experimental and control groups, and random assignment used in designing an experiment?

1.11 How do the placebo and experimenter effects cause problems in an experiment, and how can single-blind and double-blind studies control for these effects?

1.12 What are some basic elements of a real-world experiment?

1.13 What are some ethical concerns that can occur when conducting research with people and animals?

1.14 What are the basic principles of critical thinking, and how can critical thinking be useful in everyday life?

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What Is Psychology?

LO 1.1 Definition and Goals of Psychology

- Psychology: the scientific study of behavior and mental processes
  - behavior: outward or overt actions and reactions
  - mental processes: internal, covert activity of our minds

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Psychology is a Science

LO 1.1 Definition and Goals of Psychology

- Prevent possible biases from leading to faulty observations
- Precise and careful measurement

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Psychology's Four Goals

LO 1.1 Definition and Goals of Psychology

- Description
  - What is happening?
- Explanation
  - Why is it happening?
  - theory: general explanation of a set of observations or facts

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Psychology's Four Goals

LO 1.1 Definition and Goals of Psychology

- Prediction
  - Will it happen again?
- Control
  - How can it be changed?

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Structuralism

LO 1.2 Structuralism and Functionalism

- Structuralism
  - focused on the structure or basic elements of the mind

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Structuralism

LO 1.2 Structuralism and Functionalism

- Wilhelm Wundt's psychology laboratory
  - Germany in 1879
  - developed the technique of *objective introspection*: the process of objectively examining and measuring one's thoughts and mental activities

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Structuralism

LO 1.2 Structuralism and Functionalism

- Edward Titchener
  - Wundt's student; brought structuralism to America
- Margaret Washburn
  - Titchener's student; first woman to earn a Ph.D. in psychology
- Structuralism died out in the early 1900s.

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Functionalism

LO 1.2 Structuralism and Functionalism

- Functionalism
  - how the mind allows people to adapt, live, work, and play
- Proposed by William James
- Influenced the modern fields of:
  - educational psychology
  - evolutionary psychology
  - industrial/organizational psychology

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- Functionalism
  - Mary Whiton Calkins; denied Ph.D. because she was a woman
  - African Americans and early psychology

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Gestalt Psychology

LO 1.3 Early Gestalt, Psychoanalysis, and Behaviorism

- Gestalt
  - "good figure" psychology
- Started with Wertheimer, who studied sensation and perception
- Gestalt ideas now part of the study of cognitive psychology
  - cognitive psychology: field focusing not only on perception but also on learning, memory, thought processes, and problem solving

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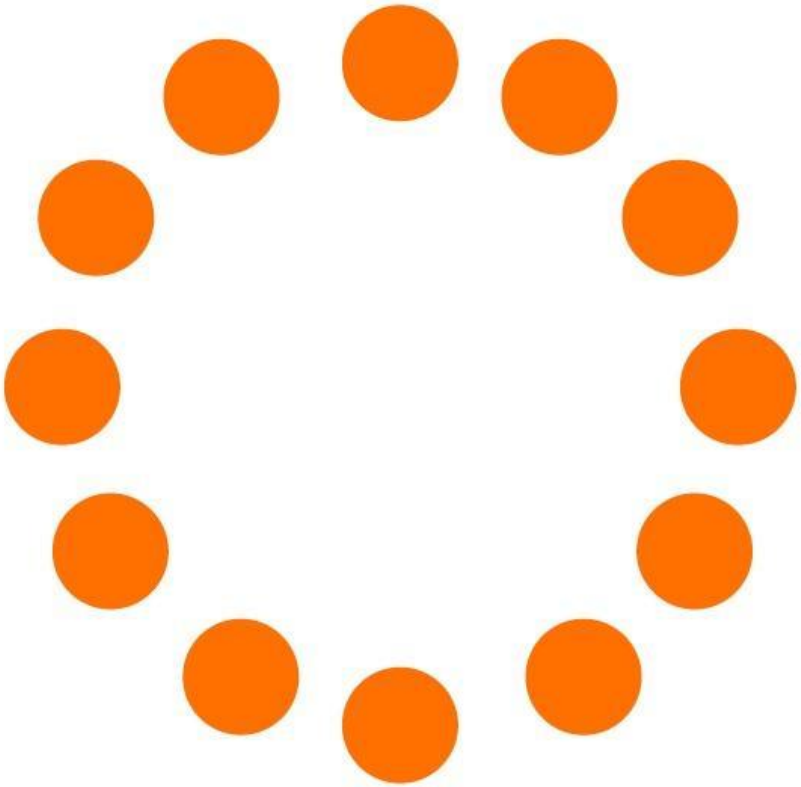
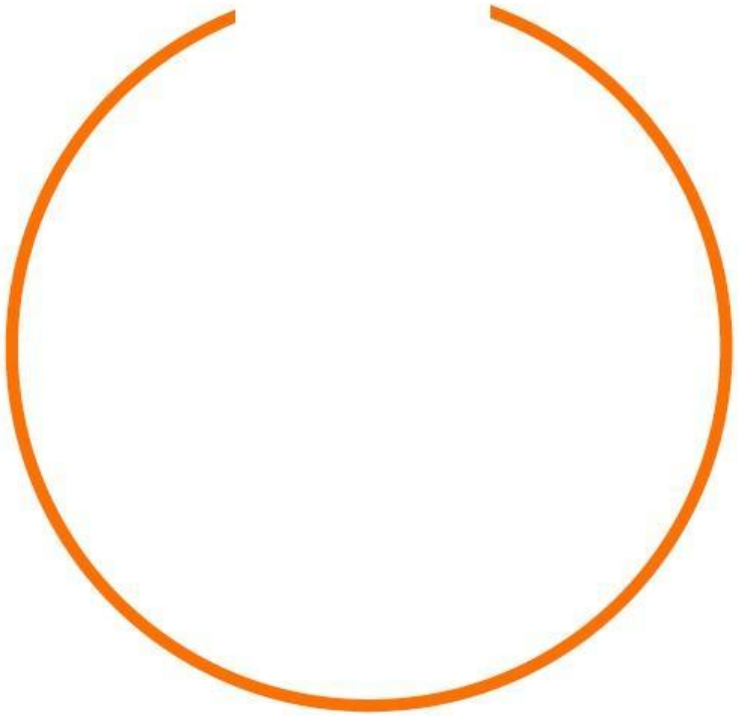
Figure 1.1 A Gestalt Perception
The eye tends to “fill in” the blanks hereand sees both of these figures as circles rather than as a series of dots or a broken line.





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Psychoanalysis

LO 1.3 Early Gestalt, Psychoanalysis, and Behaviorism

- Psychoanalysis: theory and therapy based on the work of Sigmund Freud
- Freud's patients suffered from nervous disorders with no apparent physical cause.
  - Freud proposed the existence of an unconscious (unaware) mind into which we push—or repress—our threatening urges and desires

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Psychoanalysis

LO 1.3 Early Gestalt, Psychoanalysis, and Behaviorism

- Freud's patients suffered from nervous disorders with no apparent physical cause.
  - believed that these repressed urges, in trying to surface, created nervous disorders
  - stressed the importance of early childhood experiences

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Behaviorism

LO 1.3 Early Gestalt, Psychoanalysis, and Behaviorism

- Behaviorism
  - science of behavior that focuses on observable behavior only
  - must be directly seen and measured

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Behaviorism

LO 1.3 Early Gestalt, Psychoanalysis, and Behaviorism

- Proposed by John B. Watson
  - based on the work of Ivan Pavlov, who demonstrated that a reflex could be conditioned (learned)
  - Watson believed that phobias were learned
    - case of “Little Albert”: baby taught to fear a white rat

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Behaviorism

LO 1.3 Early Gestalt, Psychoanalysis, and Behaviorism

- Mary Cover Jones: an early pioneer in behavior therapy

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Modern Perspectives

LO 1.4 Modern Perspectives: Skinner, Maslow, and Rogers

- Psychodynamic perspective: modern version of psychoanalysis
  - more focused on the development of a sense of self and the discovery of motivations behind a person's behavior other than sexual motivations

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Modern Perspectives

LO 1.4 Modern Perspectives: Skinner, Maslow, and Rogers

- Behavioral perspective
  - B. F. Skinner studied operant conditioning of voluntary behavior
  - Behaviorism became a major force in the twentieth century
  - Skinner introduced the concept of reinforcement to behaviorism

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Modern Perspectives

LO 1.4 Modern Perspectives: Skinner, Maslow, and Rogers

- Humanistic perspective
  - Owes far more to the early roots of psychology in the field of philosophy
  - People have free will: the freedom to choose their own destiny
  - Early founders:
    - Abraham Maslow
    - Carl Rogers

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Modern Perspectives

LO 1.4 Modern Perspectives: Skinner, Maslow, and Rogers

- Humanistic perspective
  - Emphasizes the human potential, the ability of each person to become the best person he or she could be
    - self-actualization: achieving one's full potential or actual self

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Modern Perspectives

LO 1.4 Modern Perspectives :Skinner, Maslow, and Rogers

- Cognitive perspective
  - focuses on memory, intelligence, perception, problem solving, and learning
- Sociocultural perspective
  - focuses on the relationship between social behavior and culture

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Modern Perspectives

LO 1.4 Modern Perspectives: Skinner, Maslow, and Rogers

- Biopsychological perspective
  - attributes human and animal behavior to biological events occurring in the body, such as genetic influences, hormones, and the activity of the nervous system

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Modern Perspectives

LO 1.4 Modern Perspectives: Skinner, Maslow, and Rogers

- Evolutionary perspective
  - focuses on the biological bases of universal mental characteristics that all humans share
  - looks at the way the mind works and why it works as it does
  - behavior seen as having an adaptive or survival value

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Types of Psychological Professionals

LO 1.5 Psychiatrist, Psychologist, and Other Professionals

- Psychologist
  - professional with an academic degree and specialized training in one or more areas of psychology
  - can do counseling, teaching, and research; may specialize in any one of a large number of areas within psychology
    - areas of specialization in psychology include clinical, counseling, developmental, social, and personality, among others

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- Psychologist
  - basic research
  - applied research

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Types of Psychological Professionals

LO 1.5 Psychiatrist, Psychologist, and Other Professionals

- Psychiatrist
  - medical doctor who has specialized in the diagnosis and treatment of psychological disorders

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Types of Psychological Professionals

LO 1.5 Psychiatrist, Psychologist, and Other Professionals

- Psychiatric social worker
  - social worker with some training in therapy methods who focuses on the environmental conditions that can have an impact on mental disorders, such as poverty, overcrowding, stress, and drug abuse

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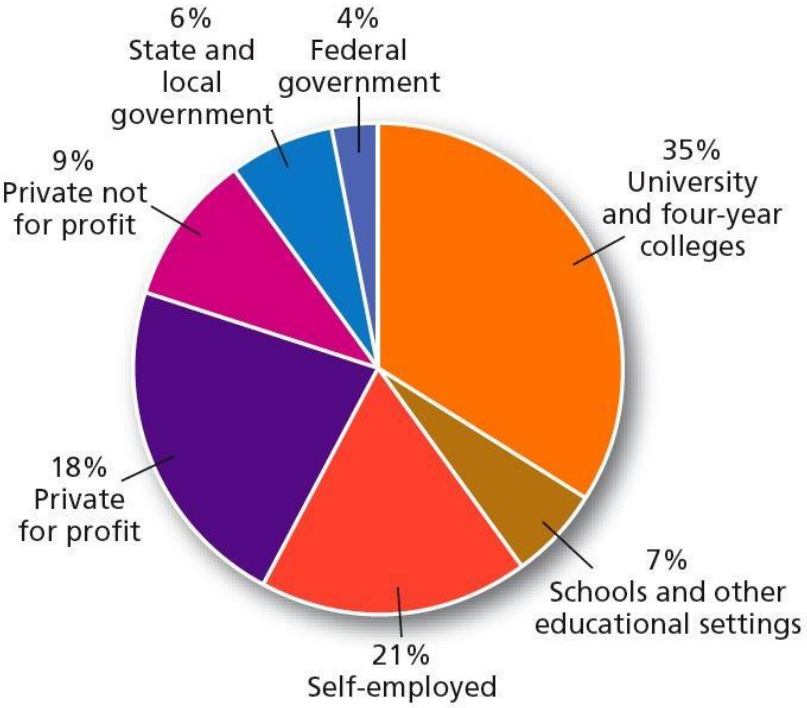
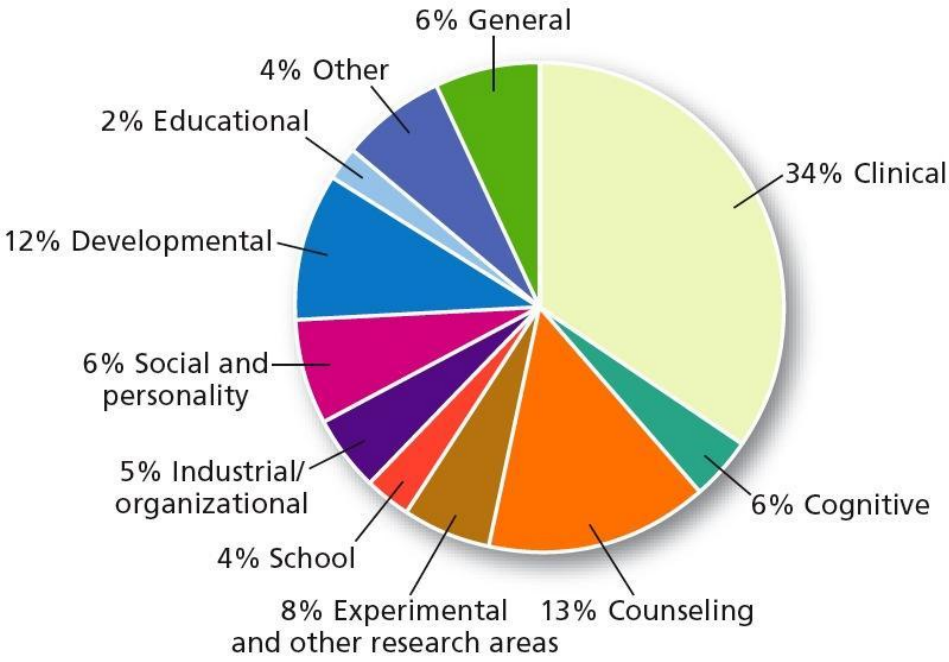
Figure 1.2 Work Settings and Subfields of Psychology
(a) There are many different work settings for psychologists. Although not obvious from the chart,many psychologists work in more than one setting. For example, a clinical psychologist may work in a hospital setting and teach at a university or college. (Tsapogas et al., 2006) (b) This pie chart shows the specialty areas of psychologists who recently received their doctorates. (Hoffer et al., 2007)



a. Where Psychologists Work



b. Subfields of Psychology

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Psychology and the Scientific Method

LO 1.6 Psychology Is a Science; Steps in the Scientific Method

- Scientific method
  - system of gathering data so that bias and error in measurement are reduced

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Psychology and the Scientific Method

LO 1.6 Psychology Is a Science; Steps in the Scientific Method

- Steps in the scientific method:
  1. Perceive the question
  2. Form a hypothesis: tentative explanation of a phenomenon based on observations.
  3. Test the hypothesis
  4. Draw conclusions
  5. Report your results so that others can try to replicate, or repeat, the study or experiment to see whether the same results will be obtained in an effort to demonstrate reliability of results

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Descriptive Methods

LO 1.7 Naturalistic and Laboratory Settings

- Naturalistic observation
  - watching animals or humans behave in their normal environment
  - major advantage: realistic picture of behavior

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Descriptive Methods

LO 1.7 Naturalistic and Laboratory Settings

- Naturalistic observation: disadvantages
  - observer effect: tendency of people or animals to behave differently when they know they are being observed
    - participant observation: a naturalistic observation in which the observer becomes a participant in the group being observed (to reduce observer effect)

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Descriptive Methods

LO 1.7 Naturalistic and Laboratory Settings

- Naturalistic observation: disadvantages
  - observer bias: tendency of observers to see what they expect to see
    - blind observers: people who do not know what the research question is (to reduce observer bias)
  - Each naturalistic setting is unique, and observations may not hold

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Descriptive Methods

LO 1.7 Naturalistic and Laboratory Settings

- Laboratory observation
  - watching animals or humans behave in a laboratory setting
  - advantages
    - control over environment
    - allows use of specialized equipment

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Descriptive Methods

LO 1.7 Naturalistic and Laboratory Settings

- Laboratory observation: disadvantage
  - artificial situation may result in artificial behavior
- Descriptive methods lead to the formation of testable hypotheses

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Descriptive Methods

LO 1.8 Case Studies and Surveys

- Case Study
  - study of one individual in great detail
  - advantage
    - tremendous amount of detail
  - disadvantage
    - cannot apply to others
  - famous case study: Phineas Gage

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Descriptive Methods

LO 1.8 Case Studies and Surveys

- Surveys
  - researchers ask a series of questions about the topic under study
- Given to representative sample
  - representative sample: randomly selected sample of subjects from a larger population of subjects
  - population: the entire group of people or animals in which the researcher is interested

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Descriptive Methods

LO 1.8 Case Studies and Surveys

- Survey advantages
  - data from large numbers of people
  - study covert behaviors
- Survey disadvantages
  - researchers have to ensure representative sample or the results are not meaningful
  - people are not always accurate (courtesy bias)

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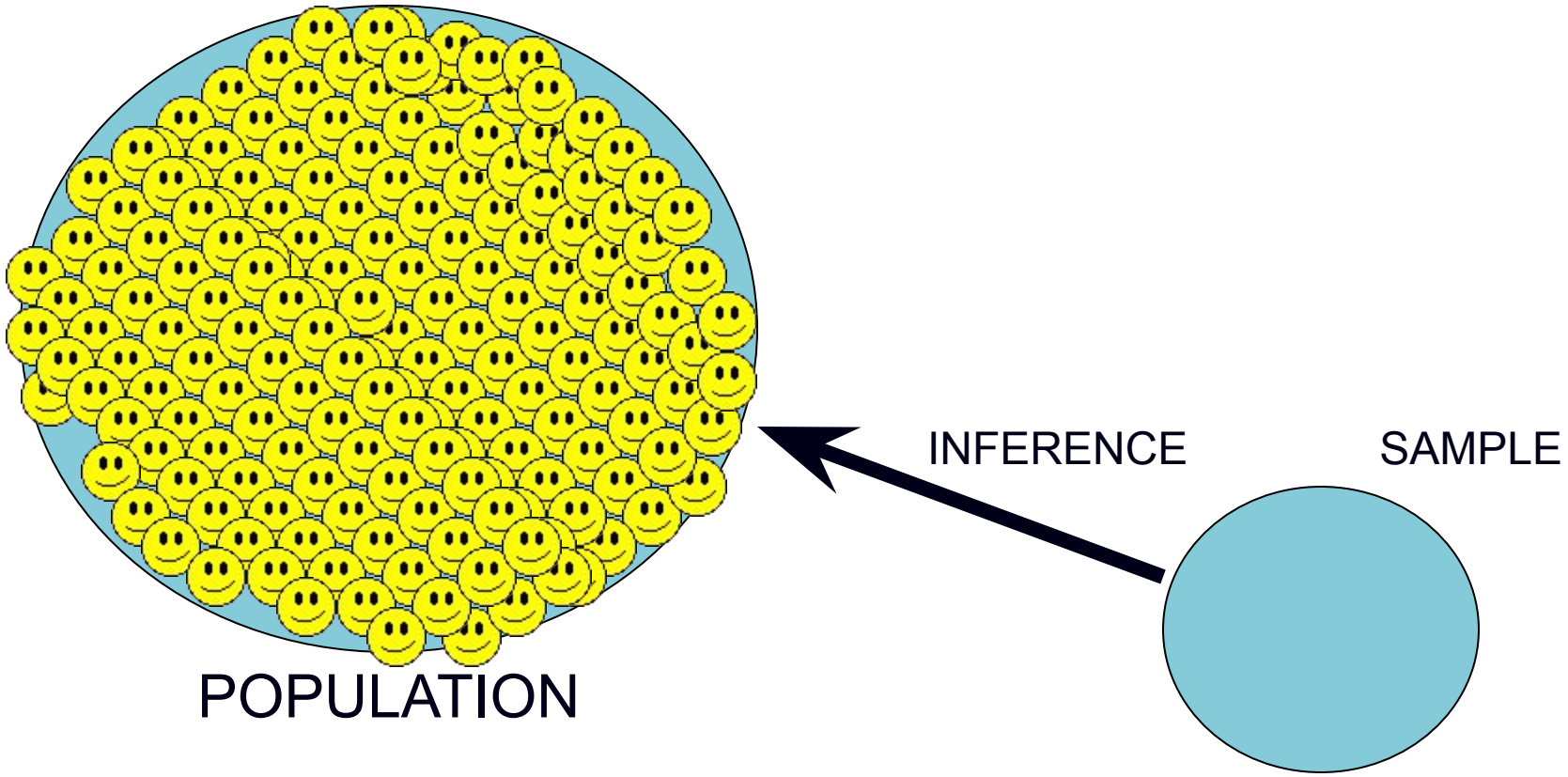
- Random Sampling from Population



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Finding Relationships

LO 1.9 Correlational Technique

- Correlation
  - measure of the relationship between two variables
  - variable: anything that can change or vary

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Finding Relationships

LO 1.9 Correlational Technique

- Correlation
  - measures of two variables go into a mathematical formula and produce a correlation coefficient (r), which represents two things:
    - direction of the relationship
    - strength of the relationship
  - knowing the value of one variable allows researchers to predict the value of the other variable

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Finding Relationships

LO 1.9 Correlational Technique

- Correlation coefficient ranges from -1.00 to +1.00.
- The closer to +1.00 or -1.00, the stronger the relationship between the variables
  - no correlation = 0.0
  - perfect correlation = -1.00 or +1.00

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Finding Relationships

LO 1.9 Correlational Technique

- positive correlation: variables are related in the same direction
  - as one increases, the other increases
  - as one decreases, the other decreases
- negative correlation: variables are related in opposite direction
  - as one increases, the other decreases
- Correlation does not prove causation!

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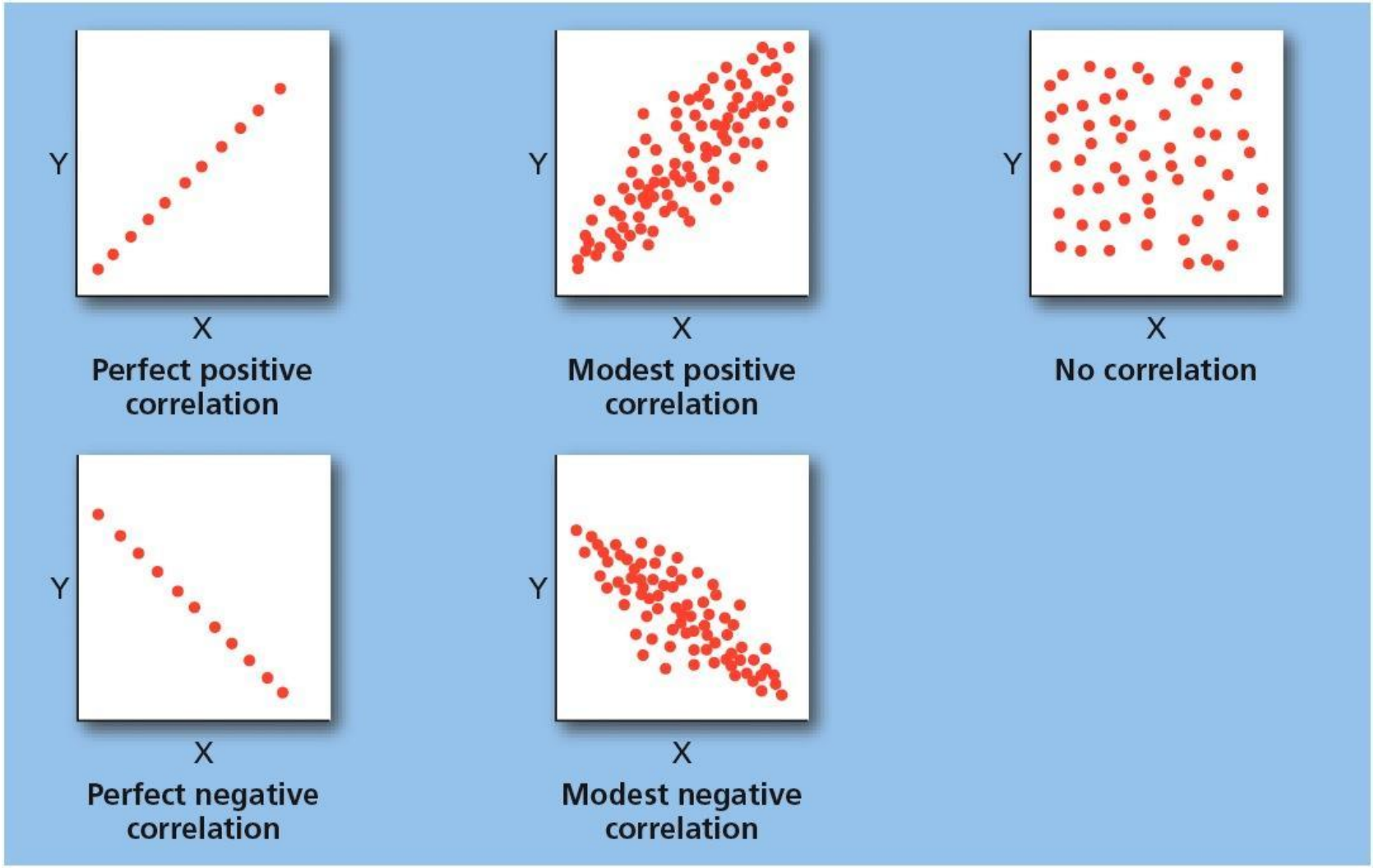
Figure 1.3 Five Scatterplots
These scatterplots show direction and strength of correlation. It should be noted that perfect correlations, whether positive or negative, rarely occur in the real world.



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The Experiment

LO 1.10 Experimental Approach and Terms

- Experiment
  - a deliberate manipulation of a variable to see whether corresponding changes in behavior result, allowing the determination of cause-and-effect relationships
- Operational Definition
  - definition of a variable of interest that allows it to be directly measured
  - definition: aggressive play

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The Experiment

LO 1.10 Experimental Approach and Terms

- Independent variable (IV)
  - the variable in an experiment that is manipulated by the experimenter
  - IV: violent TV
- Dependent variable (DV)
  - the variable in an experiment that represents the measurable response or behavior of the subjects in the experiment
  - DV: aggressive play

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The Experiment

LO 1.10 Experimental Approach and Terms

- Experimental group
  - subjects in an experiment who are subjected to the independent variable
  - experimental group: watch TV

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The Experiment

LO 1.10 Experimental Approach and Terms

- Control group
  - subjects in an experiment who are not subjected to the independent variable and who may receive a placebo treatment (controls for confounding variables).
  - control group: no TV

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The Experiment

LO 1.10 Experimental Approach and Terms

- Random assignment
  - the process of assigning subjects to the experimental or control groups randomly, so that each subject has an equal chance of being in either group
  - controls for confounding (extraneous, interfering) variables

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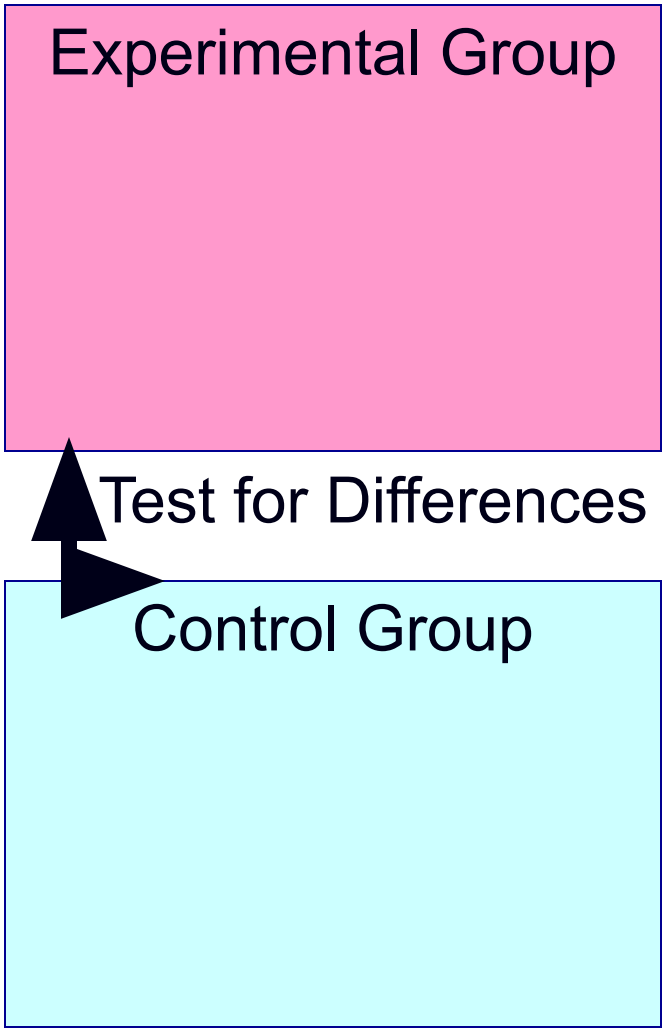
The Experiment

LO 1.10 Experimental Approach and Terms

- Random Assignment

SAMPLE



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The Experiment

LO 1.10 Experimental Approach and Terms

- Confounding Variables

SAMPLE

Experimental Group

Are differences due to manipulation or confounding variable (mood)?

Control Group

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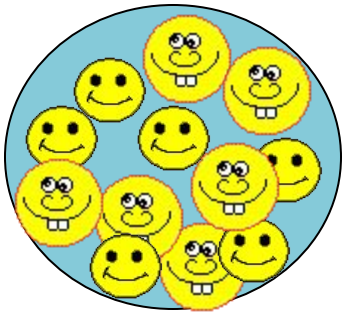
The Experiment

LO 1.10 Experimental Approach and Terms

- No Confounding Variables



SAMPLE

Experimental Group

Differences are due to manipulation, not an extraneous variable, because mood is randomly determined.

Control Group

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The Experiment

LO 1.11 Placebo and the Experimenter Effects

- Placebo effect
  - the phenomenon in which the expectations of the participants in a study can influence their behavior
- Single-blind study
  - subjects do not know whether they are in the experimental or the control group (reduces placebo effect)

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The Experiment

LO 1.11 Placebo and the Experimenter Effects

- Experimenter effect
  - tendency of the experimenter's expectations for a study to unintentionally influence the results of the study
- Double-blind study
  - neither the experimenter nor the subjects know which subjects are in the experimental or control group (reduces placebo effect and experimenter effect)

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- Single-blind study
  - the participants are “blind” to the treatment they receive

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Example of a Real Experiment

LO 1.12 Conducting a Real World Experiment

- Hypothesis
  - knowing that other people might think one's success in school is due to athletic ability rather than intelligence can make an athlete perform poorly on an academic test
- Independent variable
  - timing of "high threat" question
- Dependent variable
  - test scores

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Example of a Real Experiment

LO 1.12 Conducting a Real World Experiment

- Experimental group
  - answered “high threat” question before taking the test
- Control group
  - answered “high threat” question after taking the test
- Results-supported hypothesis
  - those asked the “high threat” question before the intellectual test scored significantly lower on that test

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Ethics in Psychological Research

LO 1.13 Ethical Concerns in Conducting Research

- Institutional review boards
  - groups of psychologists or other professionals who look over each proposed research study and judge it according to its safety and consideration for the participants in the study

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Ethics in Psychological Research

LO 1.13 Ethical Concerns in Conducting Research

- Common ethical guidelines:
  - The rights and well-being of participants must be weighed against the study's value to science.
  - Participants must be allowed to make an informed decision about participation.
  - Deception must be justified.
  - Participants may withdraw from the study at any time.

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Ethics in Psychological Research

LO 1.13 Ethical Concerns in Conducting Research

- Common ethical guidelines (cont'd):
  - Participants must be protected from risks or told explicitly of risks.
  - Investigators must debrief participants, telling them the true nature of the study and their expectations regarding the results.
  - Data must remain confidential.

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Ethics in Psychological Research

LO 1.13 Ethical Concerns in Conducting Research

- Common ethical guidelines (cont'd):
  - If for any reason a study results in undesirable consequences for the participant, the researcher is responsible for detecting and removing, or correcting, these consequences.

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Ethics in Psychological Research

LO 1.13 Ethical Concerns in Conducting Research

- Animal research answers questions we could never investigate with human research.
- The focus is on avoiding exposing animal subjects to unnecessary pain or suffering.
- Animals are used in approximately 7 percent of psychological studies.

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Critical Thinking

LO 1.14 Principles of Critical Thinking

- Critical thinking
  - making reasoned judgments about claims

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Critical Thinking

LO 1.14 Principles of Critical Thinking

- Four basic criteria:
  1. There are very few “truths” that do not need to be subjected to testing.
  2. All evidence is not equal in quality.
  3. Just because someone is considered to be an authority or to have a lot of expertise does not make everything that person claims automatically true.
  4. Critical thinking requires an open mind.

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