Chapter Summary

What Is Psychology?

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

- Psychology is the scientific study of behavior and mental processes.
- The four goals of psychology are description, explanation, prediction, and control.

Psychology Then: The History of Psychology

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

- In 1879 psychology began as a science of its own in Germany with the establishment of Wundt’s psychology laboratory. He developed the technique of objective introspection.
- Titchener, a student of Wundt, brought psychology in the form of structuralism to America. Structuralism died out in the early twentieth century. Margaret F. Washburn, Titchener’s student, was the first woman to receive a Ph.D. in psychology in 1894 and published The Animal Mind.
- William James proposed a countering point of view called functionalism, that stressed the way the mind allows us to adapt.
- Functionalism influenced the modern fields of educational psychology, evolutionary psychology, and industrial/organizational psychology.
- Some noted early psychologists were women and other minorities, such as Margaret Washburn, Mary Whiton Calkins, Francis Cecil Sumner, Kenneth and Mamie Clark, and Jorge Sanchez.

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

- Wertheimer and others studied sensation and perception, calling the new perspective Gestalt (an organized whole) psychology.
- Freud proposed that the unconscious mind controls much of our conscious behavior in his theory of psychoanalysis.
- Watson proposed a science of behavior called behaviorism, which focused only on the study of observable stimuli and responses.
- Watson and Rayner demonstrated that a phobia could be learned by conditioning a baby to be afraid of a white rat.

Classic Studies in Psychology: Psychologist Mary Cover Jones and "Little Peter"
• Mary Cover Jones later demonstrated that a learned phobia could be counterconditioned.

**Psychology Now: Modern Perspectives**

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

  • Modern Freudians such as Anna Freud, Jung, and Adler changed the emphasis in Freud’s original theory into a kind of neo-Freudianism.
  • Skinner's operant conditioning of voluntary behavior became a major force in the twentieth century. He introduced the concept of reinforcement to behaviorism.
  • Humanism, which focuses on free will and the human potential for growth, was developed by Maslow and Rogers, among others, as a reaction to the deterministic nature of behaviorism and psychoanalysis.
  • Cognitive psychology is the study of learning, memory, language, and problem solving.
  • Biopsychology emerged as the study of the biological bases of behavior.
  • The principles of evolution and the knowledge we currently have about evolution are used in this perspective to look at the way the mind works and why it works as it does. Behavior is seen as having an adaptive or survival value.

**Psychological Professionals and Areas of Specialization**

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

  • Psychiatrists are medical doctors who provide diagnosis and therapy for persons with mental disorders, whereas psychoanalysts are psychiatrists or psychologists with special training in the theory of psychoanalysis.
  • Psychiatric social workers are social workers with special training in the influences of the environment on mental illness.
  • Psychologists have academic degrees and can do counseling, teaching, and research and may specialize in any one of a large number of areas within psychology.
  • There are many different areas of specialization in psychology, including clinical, counseling, developmental, social, and personality as areas of work or study.

**Psychology: The Science**

1.6 Why is psychology considered a science, and what are the steps in using the scientific method?
The scientific method is a way to determine facts and control the possibilities of error and bias when observing behavior. The five steps are perceiving the question, forming a hypothesis, testing the hypothesis, drawing conclusions, and reporting the results.

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?

- Naturalistic observations involve watching animals or people in their natural environments but have the disadvantage of lack of control.
- Laboratory observations involve watching animals or people in an artificial but controlled situation, such as a laboratory.

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

- Case studies are detailed investigations of one subject, whereas surveys involve asking standardized questions of large groups of people that represent a sample of the population of interest.
- Information gained from case studies cannot be applied to other cases. People responding to surveys may not always tell the truth or remember information correctly.

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

- Correlation is a statistical technique that allows researchers to discover and predict relationships between variables of interest.
- Positive correlations exist when increases in one variable are matched by increases in the other variable, whereas negative correlations exist when increases in one variable are matched by decreases in the other variable.
- Correlations cannot be used to prove cause-and-effect relationships.

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

- Experiments are tightly controlled manipulations of variables that allow researchers to determine cause-and-effect relationships.
- The independent variable in an experiment is the variable that is deliberately manipulated by the experimenter to see if related changes occur in the behavior or responses of the participants and is given to the experimental group.
- The dependent variable in an experiment is the measured behavior or responses of the participants.
- The control group receives either a placebo treatment or nothing.
- Random assignment of participants to experimental groups helps to control for individual differences both within and between the groups that might otherwise interfere with the experiment’s outcome.
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?

- Experiments in which the subjects do not know if they are in the experimental or control groups are single-blind studies, whereas experiments in which neither the experimenters nor the subjects know this information are called double-blind studies.

Classic Studies in Psychology: Teresa Amabile and the Effect of Extrinsic Reward on Creativity

1.12 What are some basic elements of Amabile's creativity experiment?

- Dr. Teresa Amabile's experiment explored the relationship of rewards and creativity by promising a reward to one group of children for being creative (the experimental group) and not to a second group of children, who were being creative for fun (the control group).
- Her conclusion was that external rewards have a negative effect on creativity.

Ethics of Psychological Research

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

- Ethical guidelines for doing research with human beings include the protection of rights and well-being of participants, informed consent, justification when deception is used, the right of participants to withdraw at any time, protection of participants from physical or psychological harm, confidentiality, and debriefing of participants at the end of the study.
- Animals in psychological research make useful models because they are easier to control than humans, they have simpler behavior, and they can be used in ways that are not permissible with humans.

Critical Thinking

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

- Critical thinking is the ability to make reasoned judgments. The four basic criteria of critical thinking are that there are few concepts that do not need to be tested,
evidence can vary in quality, claims by experts and authorities do not automatically make something true, and keeping an open mind is important.

- Faulty reasoning and a failure to use critical thinking can lead to belief in false systems such as palmistry and graphology.

Applying Psychology to Everyday Life: Stereotypes, Athletes, and Test Performance

- Athletes were given an intellectual test either before or after being exposed to a stereotyping question designed to increase their awareness of negative stereotypes toward student athletes. Those exposed to the stereotyping question before taking the intellectual test scored much lower than those who were exposed to the question after taking the test, implying that obvious negative stereotypes in higher education may be an important cause of the tendency of student athletes to underperform in academics.