

Chapter 1: What Is Psychology?

Truth or Fiction?

- More than 2,000 years ago, Aristotle wrote a book on psychology, with contents similar to your own textbook.
- The ancient Greek philosopher Socrates suggested a research method that is still used in psychology.

Truth or Fiction?

- As psychologist Wilhelm Wundt lay on his deathbed, his main concern was to analyze the experience of dying.
- Men receive the majority of doctoral degrees in psychology.

Truth or Fiction?

- Even though she had worked to complete all the degree requirements, the first female president of the American Psychological Association turned down the doctoral degree that was offered to her.
- You could survey millions of voters and still fail to predict the outcome of a presidential election.

Truth or Fiction?

- In many experiments, neither the subjects nor the researchers know who is receiving the real treatment and who is not.
- A psychologist could write a believable personality report about you without interviewing you, testing you, or even knowing you.

Preview of Chapter One

- Psychology as a Science
- What Psychologists Do
- Where Psychology Comes From
- How Today's Psychologists View Behavior and Mental Processes
- How Psychologists Study Behavior and Mental Processes

Psychology as a Science

What is Psychology?

- Psychology is the scientific study of behavior and mental processes.

Goals of Psychology

- Psychology seeks to
 - to describe
 - explain
 - predict
 - control behavior and mental processes

What is a Theory?

- A theory allows you to
 - propose reasons for relationships
 - derive explanations and predictions
 - make predictions about the behavior or mental process

What Psychologists Do – Something for Everyone?

What Do Psychologists Do?

- Research
 - Pure research
 - Applied research
- Practice
- Teaching

Fields of Psychology

- Clinical
- School
- Developmental
- Personality
- Environmental
- Experimental
- Health
- Industrial
 - Organizational
 - Human Factors
 - Consumer
- Sport
- Forensic

Where Psychology Comes From: A History

Historical Roots of Psychology

- Ancient Greeks
 - Aristotle
 - *Peri Psyches*
 - Democritus
 - Plato
 - Introspection

Psychology as a Laboratory Science

- Gustav Theodor Fechner
 - *Elements of Psychophysics* (1860)
- Wilhelm Wundt
 - First psychology laboratory (1879)

Structuralism: The Elements of Experience

- Wilhelm Wundt
- Structuralism breaks conscious experiences into
 - objective sensations (sight or taste), and
 - subjective feeling (emotions, memories, dreams)

Functionalism: Making Psychology a Habit

- William James
- Functionalism focused on behavior in addition to mind and consciousness
- Influenced by Darwin's theory of evolution

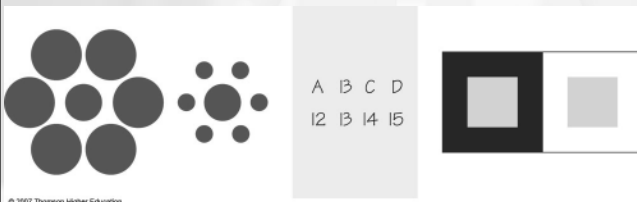
Behaviorism: Practicing Psychology in Public

- John Broadus Watson
- Behaviorism focuses on learning observable (measurable) behavior
- B.F. Skinner
 - Learned behavior is behavior that is reinforced

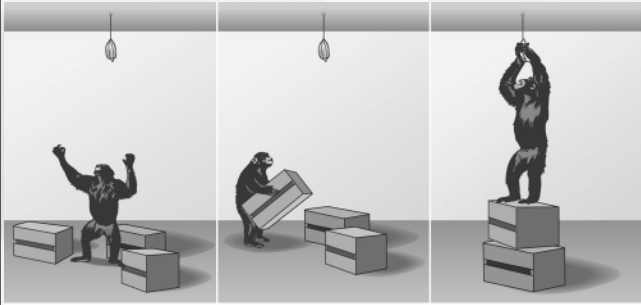
Gestalt Psychology: Making Psychology Whole

- Max Wertheimer, Kurt Koffka, Wolfgang Köhler
- Gestalt focused on perception and its influence on thinking and problem solving
 - Perception of whole is greater than the parts
 - Insight learning
 - Active and purposeful

The Importance of Context



Some Insight Into Insight



Psychoanalysis: Digging Beneath the Surface

- Sigmund Freud
- Psychoanalysis
 - Theory of personality
 - Therapy
- Psychodynamic theory

How Today's Psychologists View Behavior and Mental Processes

Evolutionary and Biological Perspectives

- Evolutionary focuses on evolution of behavior and mental processes
 - Charles Darwin – “survival of the fittest”
- Biological links activity of the brain, hormones, and heredity with behavior and mental processes

Cognitive Perspective

- Concerned with ways we mentally represent the world and process information
 - Memory, perceptions, learning, problem solving, decision making, language, planning

Humanistic - Existential Perspective

- Humanism stresses capacity for self fulfillment
 - Role of consciousness, self-awareness, decision making
- Existentialism stresses free choice and personal responsibility
 - Carl Rogers
 - Abraham Maslow

Psychodynamic Perspective

- Neanalyst focus on conscious choice and self-direction
 - Karen Horney
 - Erik Erikson

Perspectives on Learning

- Behavioral
 - Emphasize influence of environment
 - Repetition and reinforcements
- Social Cognitive
 - People modify and create their environment

Sociocultural Perspective

- Focuses on the influence of differences among people on behavior and mental processes
 - Ethnicity, gender, culture, socioeconomic status

Diversity Within Psychology

- Ethnicity
 - Gilbert Haven Jones, J. Henry Alston
 - Kenneth Clark and Mamie Phipps Clark
 - Nancy Boyd-Franklin, Tony Strickland

Diversity Within Psychology

- Gender
 - Mary Whiton Calkins
 - Christine Ladd-Franklin
 - Margaret Floy Washburn
 - Helen Bradford Thompson
 - Mary Salter Ainsworth
 - Elizabeth Loftus
 - Susan Nolen-Hoeksema

How Psychologists Study Behavior and Mental Processes

Principles of Critical Thinking

- Be skeptical
- Insist on evidence
- Examine definitions of terms
- Examine the assumptions or premises of arguments
- Be cautious in drawing conclusions from evidence

Principles of Critical Thinking (continued)

- Consider alternative interpretations of research evidence
- Do not oversimplify
- Do not overgeneralize
- Apply critical thinking to all areas of life

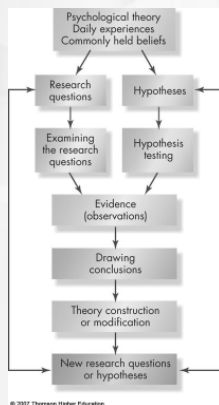
Life Connections: Critical Thinking and Astrology

- Barnum Effect
 - Generalized personality profile has enough in common with our perception of our personality

The Scientific Method

- Formulate a research question
- State the hypothesis
- Test the hypothesis
- Draw conclusions based on findings
- Publish research
- Replicate study

Scientific Method



Samples and Populations

- Sample
 - Individual being studied
- Population
 - Entire group targeted for study
- Representative samples allow generalization of findings

Random and Stratified Sampling

- Random sample
 - Each member of population has equal chance of selection
- Stratified sample
 - Subgroups are represented proportionally
- Volunteer bias
 - Bias represented by studying people who volunteer to participate

Video Connections: Facial Analysis - The Scientific Method in Action

- What might be some real-world applications of facial applications?
- Explain why facial analysis might be a more objective measure of emotions than our own perceptions?
- Explain why the use of computers can be so important in research.

Facial Analysis



PLAY VIDEO

Methods of Observation

- Case Study
 - Gather information about individuals or small groups
- Survey
 - Used to collect information that cannot be observed directly

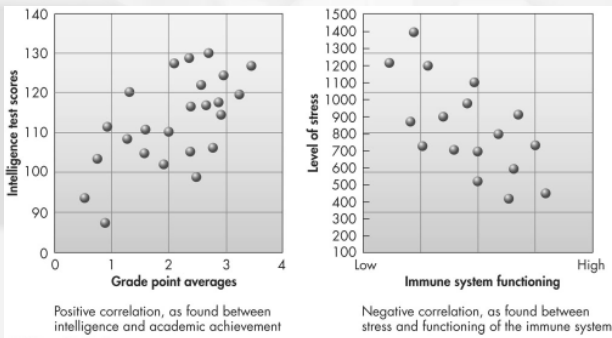
Methods of Observation

- Naturalistic Observation
 - Observe subjects in their natural environment
 - Unobtrusive measure

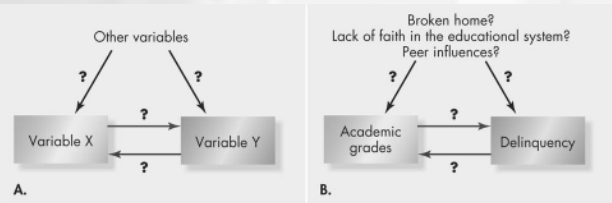
Correlational Method

- Mathematical method of determining a relationship between variables
- Correlation coefficient
 - Number between +1.00 and -1.00
 - Expresses strength and direction of relationship between variables

Positive and Negative Correlations



Correlational Relationships, Cause, and Effect



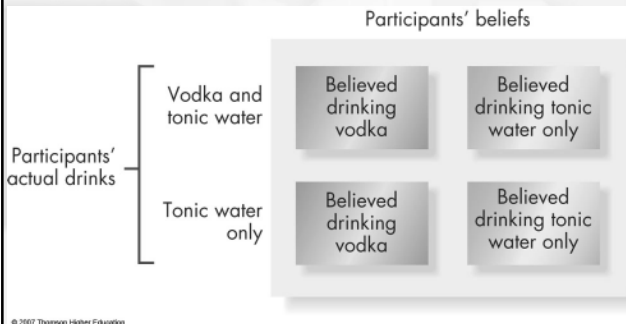
Experimental Method

- Demonstrates cause and effect through scientific method
 - Treatment
 - Independent variable
 - Dependent variable

Experimental Method

- Experimental groups
- Control groups
- Placebos
- Blind
- Double-blind study

Experimental Conditions in the Lang Study



Ethics of Research with Humans

- Ethical review committee and ethical standards
 - Promote individual dignity, human welfare and scientific integrity
 - Ensure no harm will come to subjects
- Informed consent
- Confidentiality
- Debrief subjects

Ethics of Research with Animals

- Animals are used when research cannot be carried out with humans
- Animals may be harmed, when
 - There is no alternative, and
 - Benefits of the research justify the harm
