Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

SKU: 9781259610394-SOLUTIONS

Table of Contents

Module 2: A Science Evolves: The Past, the Present, and the Future 2
Learning Outcomes 2
LO2.1: The Roots of Psychology 2
Progress Check 2
Discussion Questions 3
LO2.2: Today's Five Major Perspectives 3
Progress Check 4
Discussion Questions 5
LO2.3: Psychology and Your Life 5
Progress Check 5
Discussion Questions 5
LO2.4: Psychology's Key Issues and Controversies 6
Progress Check 6
Discussion Questions 7
Additional Activities 8
Critical Thinking Exercises 8
Journal Exercises 8
In-Class Activities 9

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

Module 2: A Science Evolves: The Past, the Present, and the Future

These lectures are concerned with explaining the history behind the development of various schools of psychology, describing modern-day perspectives on psychology, applying theories of psychology to your life, and summarizing key issues and controversies surrounding the field of psychology.

Learning Outcomes

2.1: Explain the roots of psychology.
2.2: Discuss today's perspectives on psychology.
2.3: Apply psychology to your life.
2.4: Summarize psychology's key issues and controversies.

LO2.1: The Roots of Psychology

1. The science of psychology began in 1879, when Wilhelm Wundt set up the first scientific laboratory in Leipzig, Germany.

2. Structuralism is the school of thought concerned with analyzing sensations and personal experience into basic elements.

3. Introspection is the process used by structuralists, which involves the person looking inward and examining his or her own thoughts, feelings, or sensations.

4. Functionalism is the school of thought that analyzes the role behavior plays in allowing people to adapt to their environments.

5. Gestalt psychology is an approach to psychology that focuses on the organization of perception and thinking in whole units instead of individual parts of that perception.

6. Women made a significant contribution to the development of psychology as a science, despite the fact that they faced prejudices and discriminatory practices.

Progress Check

Match:

A. Structuralism

B. Functionalism

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

C. Gestalt psychology

D. Introspection

E. Natural selection

1. ____ is the school of thought that analyzes the role behavior plays in survival.

2. ____ is an approach that focuses on the organization of perception and thinking in whole units.

3. ____ is the process of looking inward.

4. ____ is known as survival of the fittest.

5. ____ is the school of thought concerned with analyzing sensations and personal experience into basic elements.

Answers:

1. B 2. C 3. D 4. E 5. A

Discussion Questions

Picture students in the classroom.

1. Why do some students make As and others make Fs?

2. Why do some have what it takes to succeed and others do not?

3. What are the characteristics and behaviors of those students who excel?

4. What school of psychology most resembles this approach to education?

LO2.2: Today's Five Major Perspectives

1. The neuroscience perspective views behavior from the perspective of the brain, the nervous system, and other biological functions.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

2. The psychodynamic perspective is based on the view that behavior is motivated by unconscious inner forces over which the individual has little control.

3. The behavioral perspective suggests that observable, measurable behavior should be the focus of study.

4. The cognitive perspective focuses on how people think, understand, and know about the world.

5. The humanistic perspective suggests that all individuals naturally strive to grow, develop, and be in control of their lives and behavior.

Progress Check

Match each perspective of psychology with its description.

A. Neuroscience

B. Psychodynamic

C. Behavioral

D. Cognitive

E. Humanistic

1. This perspective is most interested in observing and measuring behavior.
2. This perspective focuses on the brain, the nervous system, and other biological functions.
3. This perspective suggests that all individuals naturally strive to grow, develop, and be in control of their lives and behavior.
4. This perspective is based on the view that behavior is motivated by unconscious inner forces.
5. This perspective focuses on how people think, understand, and know about the world.

Answers:

1. C 2. A 3. E 4. B 5. D

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

Discussion Questions

Do you think people have a choice in how they act and feel, or do the processes in their body, combined with their genes, control how they act and feel? Is behavior completely determined or non-determined, or is there a combination?

LO2.3: Psychology and Your Life

1. Psychologists work to understand and find solutions to real-world problems.

2. To further explore the many ways in which psychology has an impact on everyday life, check out the Psychology Matters website of the American Psychological Association: www.psychologymatters.org.

Progress Check

1. (True or False) Research shows that talking on a cell phone does not impair a person's ability to drive very much.

2. (True or False) Psychologists are researching how aggression can be prevented in childhood.

3. (True or False) Psychologists are researching the social factors that play a role in obesity.

Answers:

1. False 2. True 3. True

Discussion Questions

Marcus is a third-grader. He has been sent to the office three times this week for hitting other boys on the playground. The principal asks Marcus why he hits his friends. Marcus replies, "Because they make me mad." The principal calls Marcus's mother. She tells the principal that the kids must be threatening Marcus, because she told him to hit and fight back if he feels threatened. When the principal asks Marcus what the other kids are doing to make him mad, Marcus replies, "They tag me out when we play kickball."

1. Are the other kids threatening Marcus by tagging him out in a kickball game?

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

2. Could Marcus perceive this as threatening behavior?

3. What do you begin to think about Marcus's home environment when hearing his mother's philosophy?

4. How do you think Marcus will handle competitive sports as he enters his early adolescent years?

LO2.4: Psychology's Key Issues and Controversies

1. Psychologists disagree about the origins of key issues and solutions surrounding these issues; however, all psychologists agree that researchers must continue to search for solutions to advance individual life and society.

2. Psychologists from all disciplines are researching several key issues today:

- Nature versus Nurture
- Conscious versus Unconscious Causes of Behavior
- Observable Behavior versus Internal Mental Processes
- Free Will versus Determinism
- Individual Differences versus Universal Principles

Progress Check

Multiple Choice: Choose the best answer.

1. When looking at the key issue of "nature versus nurture," nature refers to what?

A. the genes people inherit
B. the environment in which people are raise
C. the outdoors surrounding the person's home

2. _____ psychologists think that the only legitimate source of information is behavior that can be observed directly.

A. Cognitive
B. Psychoanalytic
C. Behavioral

3. The notion that behavior is largely produced by factors beyond people's willful control is referred to as _____.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

A. free will
B. determinism
C. unconscious forces

4. Psychologists agree on the following point regarding the "nature versus nurture" debate.

A. Genes (nature) definitely influence behavior more.
B. A person's home and the way he or she is raised definitely influence behavior more.
C. A combination of both influence behavior, but psychologists disagree regarding which one has a larger impact on behavior.

Answers: 1. A 2. C 3. B 4. C

Discussion Questions

Chris gets fired from his job. He works hard to find another job, but he cannot find one. Chris does not pay his rent. He gets evicted from his apartment. He is now homeless. Chris is angry and blames his situation on the boss who fired him.

1. Did Chris freely choose to become homeless, or was this determined?

2. Did Chris have any role in being evicted from his apartment?

3. What would a psychologist with a deterministic viewpoint think? What about a psychologist with a non-deterministic viewpoint?

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

Additional Activities

Critical Thinking Exercises

Critical Thinking Exercise #1: Nature vs. Nurture and the Workplace

1. Psychologists study behavior in the workplace. Some people strive to achieve and promote up the corporate ladder quickly. Other people are content to show up, work their hours, and receive fair wages. Do you believe drive and ambition are genetically inherited or learned?
2. If a person is born with a high intelligence quotient (IQ), will this person automatically succeed? Why or why not?
3. If a person is struggling to find a job, is it society's responsibility to provide food and shelter for this person? Why or why not?

Journal Exercises

Journal Exercise #1: The Impact of Nature versus Nurture on Your Performance in School

Think about your elementary-school years. Can you remember what it was like in third grade, fourth grade, even fifth grade? Close your eyes and picture yourself in math. Picture yourself in language arts. Did you have music, art, and physical education classes? How did your parents or caretakers approach school? What rules did they have about homework and free time? Were your parents or caretakers active in your school? Did they check your work? Did they meet with your teachers? What kind of space did you have to complete your homework? Was school hard for you? Do you feel your performance in school was related to your IQ, how smart you are, or did your environment play a larger role in your performance?

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

In-Class Activities

#1: Observable Behavior versus Internal Mental Processes: Can You Guess the Feeling?

Divide the class into small groups of four students. Each student needs paper and a pen. Direct the groups to walk to a close point on the campus and quietly observe other students. Explain that it is important to be discreet, because people change their behavior when they are aware they are being observed. Give the groups 15 minutes to record the behaviors they observe. Emphasize that observable behaviors are only those actions or words you can see and hear. This activity works best during an extended break or a time when many students are walking around. The small groups should then return to the classroom.

Have each student return to his or her seat. Ask each student to write down what feeling or thoughts probably accompanied the subject's actions. After completing this, ask students to meet with their small groups again. Compare the feelings they came up with for the subjects. Did each group member identify the same feeling? If they were different, what accounts for the difference? See if students have an opinion on why the subject felt the way he or she did. Conclude the exercise by reminding them that what we think about another person's thoughts may not be accurate. We tend to project our own feelings and experiences on to those we observe.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

psychology AND YOUR LIFE

FELDMAN
3e

Chapter 2: Neuroscience and Behavior

© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

Neurons

- Learning Outcomes
  - Explain the structure of a neuron
  - Describe how neurons fire
  - Summarize how messages travel from one neuron to another
  - Identify neurotransmitters

© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

The Structure of the Neuron

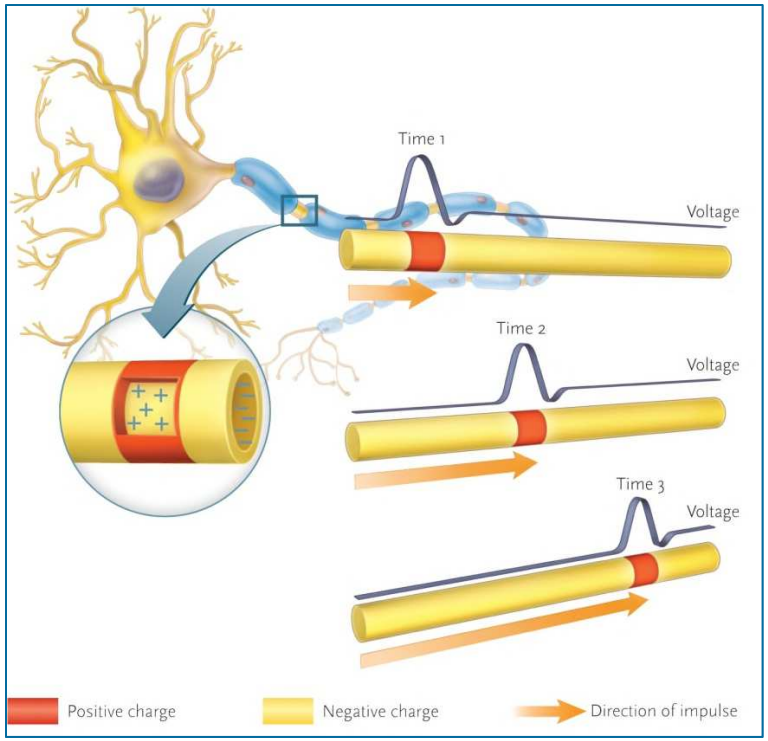
- **Neurons**: nerve cells; the basic elements of the nervous system
  - **Dendrites**: fibers that receive electrical messages *(impulses)* from other neurons
  - **Axon**: long extension that carries messages to other neurons
    - **Myelin sheath**

© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

How Neurons Fire

- **All-or-none law**
- **Action potential**
- **Mirror neurons**



© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

Where Neurons Connect

- **Synapse**: the space between two neurons where the axon of the sending neuron communicates with the dendrites of the receiving neuron with chemical messages

© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

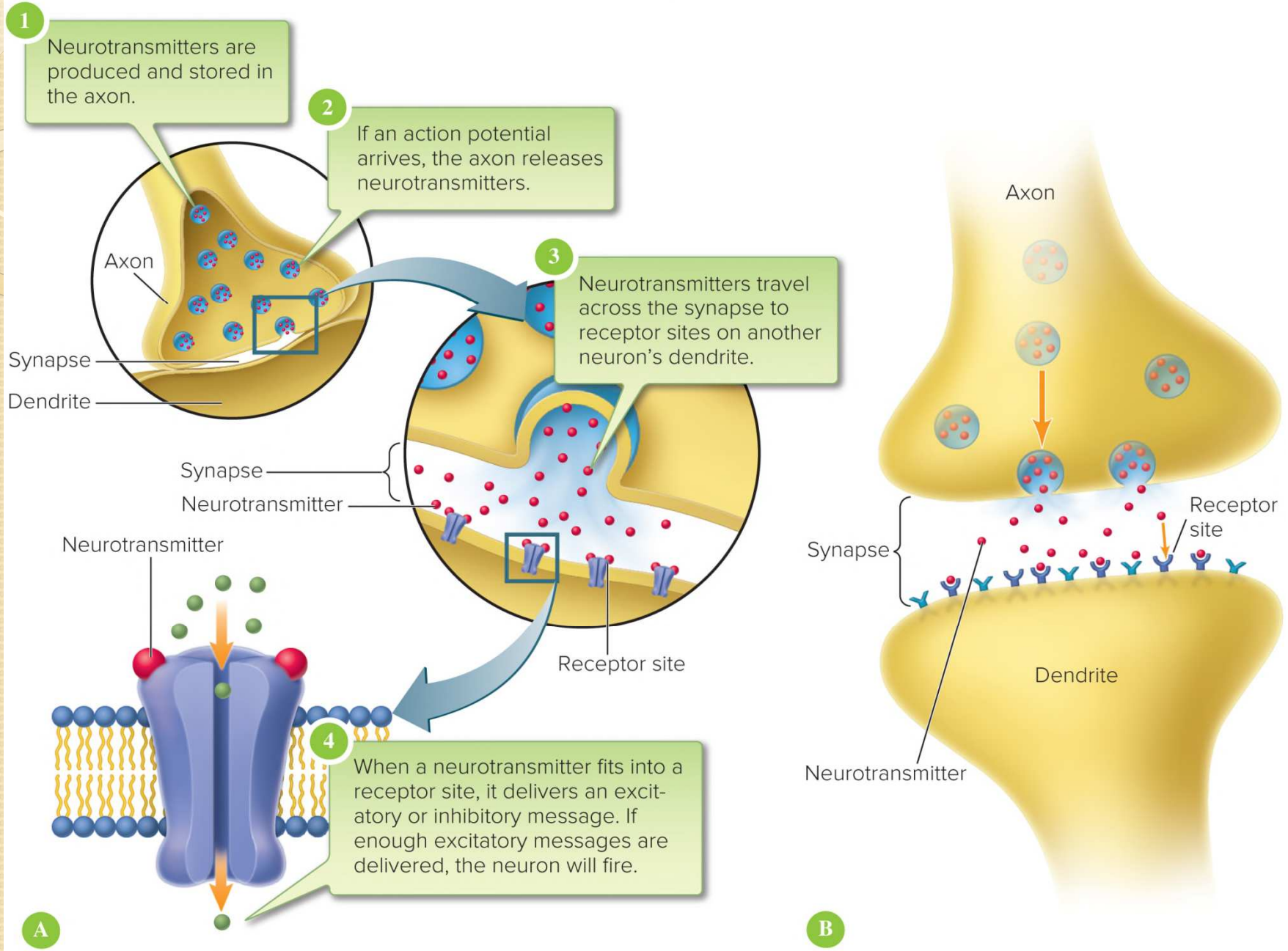
Where Neurons Connect

- **Neurotransmitters**: the chemical messengers received at dendrites or cell body of receiving neuron
  - Deliver **excitatory** (make it more likely receiving neuron will fire) or **inhibitory** (make it less likely they will fire) **messages**
- **Reuptake**: terminal buttons of sending neuron reabsorb neurotransmitters

© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

Copyright © McGraw-Hill Education. Permission required for reproduction or display.



© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

Neurotransmitters

- Major neurotransmitters
  - **Acetylcholine** (ACh): messages related to muscle movement, memory, & cognitive functions; may be related to Alzheimer's
  - **Dopamine** (DA): messages related to movement, attention, & learning; related to Parkinson's & possibly schizophrenia

© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

The Nervous & Endocrine Systems

- Learning Outcomes
  - Explain how the structures of the nervous system are linked together
  - Describe the operation of the endocrine system and how it affects behavior

© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

The Nervous System

- **Central nervous system**: brain and spinal cord
  - **Reflex**: automatic response to a stimulus; controlled by the spinal cord
- **Peripheral nervous system**: all parts of the nervous system other than the brain and spinal cord

© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

The Nervous System

- **Somatic division**: voluntary movements & communication with sense organs
- **Autonomic division**: involuntary functions of the body that keep you alive
  - **Sympathetic**
  - **Parasympathetic**

© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

The Endocrine System

- **Endocrine system**: chemical communication network that sends messages throughout the body through *hormones* in the bloodstream
  - **Hormones**
  - **Pituitary gland**

© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

The Brain

- Learning Outcomes
  - Illustrate how researchers identify the major parts and functions of the brain
  - Describe the central core of the brain
  - Describe the limbic system of the brain
  - Describe the cerebral cortex of the brain
  - Recognize neuroplasticity and its implications
  - Explain how the two hemispheres of the brain operate interdependently and the implications for human behavior

© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

Studying the Brain

- *Electroencephalogram* (EEG)
- *Positron emission tomography* (PET) scan
- *Functional magnetic resonance imaging* (fMRI)
- *Transcranial magnetic stimulation* (TMS)

© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

The Central Core: Our "Old" Brain

- **Central core**: controls basic functioning
  - Hindbrain: **medulla** (breathing and heartbeat), **pons** (integrates movement between right and left side of the body, regulates sleep), and **cerebellum** (controls bodily balance)
  - Midbrain into forebrain: **reticular formation** (can immediately activate other parts of the brain to produce arousal), **thalamus** (relay station for information about the senses), and **hypothalamus** (maintains homeostasis and regulates vital, survival behavior)

© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

The Limbic System

- **Limbic system**: control a variety of basic functions relating to emotion, learning, memory, pleasure, and self-preservation (ex., eating, aggression, reproduction); includes the amygdala and hippocampus

© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

The Cerebral Cortex

- **Cerebral cortex**: responsible for sophisticated, uniquely human information processing
  - **Frontal lobes**
  - **Parietal lobes**
  - **Temporal lobes**
  - **Occipital lobes**

© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

The Cerebral Cortex

- **Motor area**
- **Sensory area**
- **Association areas**

Copyright © McGraw-Hill Education. Permission required for reproduction or display.

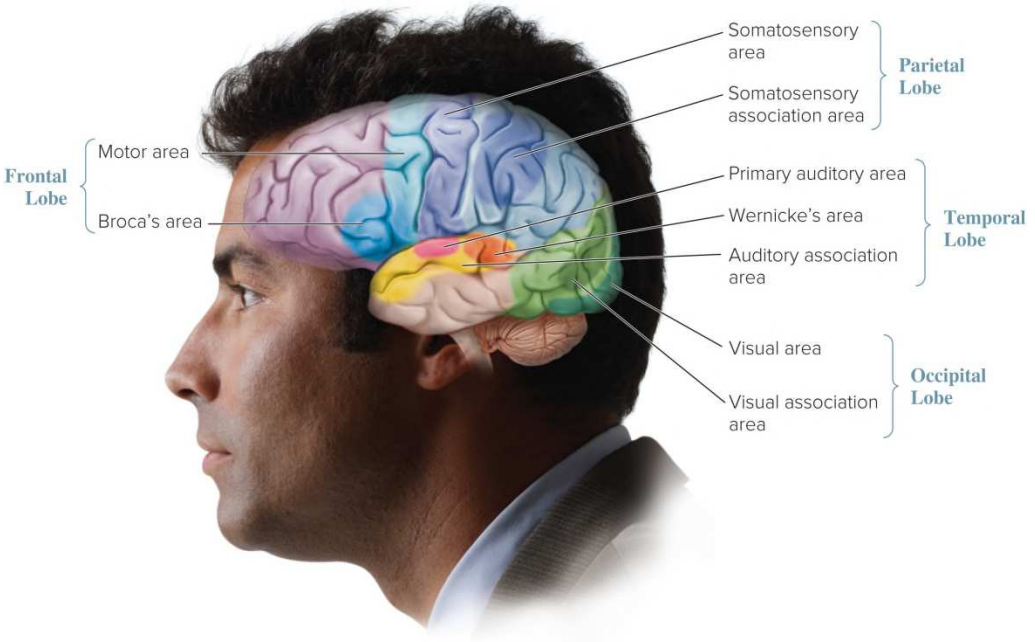


Photo: © Ron Krisel/Getty Images RF

© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Neuroplasticity and the Brain

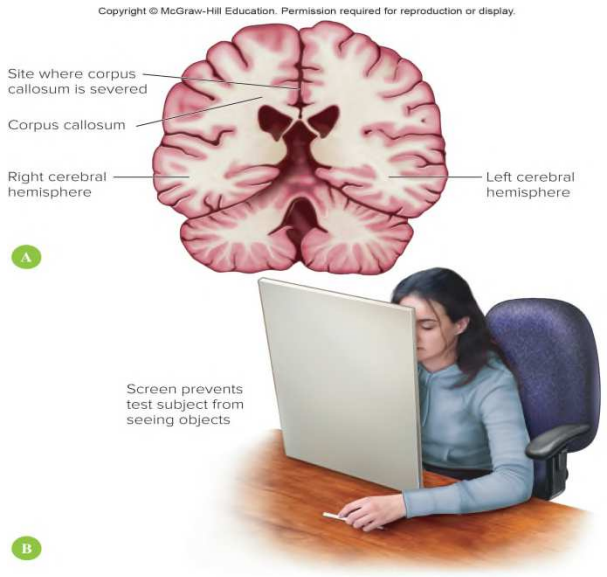
- **Neuroplasticity**: changes in the brain over the lifespan having to do with the addition of new neurons *(neurogenesis)*, new interconnections between neurons, and the reorganization of information-processing areas

© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual

Specialized Hemispheres

- **Hemispheres**: left and right halves of the brain; each controls motion and sensation in the opposite side of the body ("right brain" and "left brain")
- **Lateralization**: dominance of one hemisphere in specific functions



© 2017 The McGraw-Hill Companies, Inc. All rights reserved.

Psychology and Your Life with POWER Learning 3rd edition Feldman Solutions Manual