

## Chapter 2

# Theories and Treatment of Abnormality

### TEACHING OBJECTIVES

After reading and studying this chapter and participating in lecture and discussion, students should be able to:

1. Distinguish between biological, psychological, and social approaches to abnormality, and discuss how each approach leads to different conceptions of the causes of abnormality. Also, discuss how these approaches are not mutually exclusive, and summarize how advocates of all approaches might work together to develop integrated models for understanding abnormality.
2. Discuss the three biological causes of abnormality, and describe the relationship between structural brain abnormalities and psychological impairment. Summarize the processes involved in communication between neurons and what aspects of this process may break down resulting in psychological distress. Summarize how researchers investigate genetic contributions to psychopathology and the current polygenic model.
3. Describe the basic foundation of psychodynamic theory, and know each defense mechanism. Discuss how Erikson and the object relations school differ from the traditional perspective.
4. Summarize classical and operant conditioning, and give examples of each.
5. Discuss Bandura's social learning theory, and relate it to both the "pure" behavioral theories and to the cognitive theories.
6. Know and distinguish among causal attributions, control beliefs, self-efficacy, dysfunctional assumptions, and automatic thoughts.
7. Discuss the elements of both humanistic and existential theories and how they differ.
8. Discuss the sociocultural theories of abnormality in terms of the hypothesized role of interpersonal relationships, family dynamics, and the larger society in producing psychological symptoms.

## CHAPTER OUTLINE

- I. Approaches Along the Continuum
  - A. Three approaches: Sociocultural, Biological, & Psychological
  - B. Biopsychosocial
  - C. Diathesis-stress model
- II. Biological Approaches
  - A. Brain Dysfunction
    1. Three main regions of the brain:
      - a. hindbrain
      - b. midbrain
      - c. forebrain – cerebral cortex
    2. Hindbrain structures
      - a. medulla
      - b. pons
      - c. reticular formation
      - d. cerebellum
    3. Midbrain structures
      - a. superior and inferior colliculus
      - b. substantia nigra
    4. Forebrain structures - cerebral cortex  
Two hemispheres (left and right) connected by the corpus callosum. Each divided into 4 lobes: frontal, parietal, occipital and temporal. Subcortical structures
      - a. thalamus
      - b. hypothalamus
      - c. pituitary gland
      - d. limbic system
      - e. amygdala
      - f. hippocampus
  - B. Biochemical Imbalances
    1. Neurotransmitters
      - a. synapse / synaptic gap
      - b. receptors
    2. Neurotransmitter processes
      - a. reuptake
      - b. degradation
    3. Some NTs and their functions
      - a. Dopamine
      - b. Norepinephrine
      - c. GABA
    4. Role of Endocrine system
      - a. hormones
      - b. pituitary gland
  - C. Genetic Abnormalities

1. Behavioral genetics
2. 46 chromosomes – 23 from the egg & 23 from the sperm
3. XX – male / XY female
4. Alleles
- D. Interactions Between Genes and Environment
  1. Twin Studies
  2. Epigenetics
- E. Drug Therapies
  1. Antipsychotic drugs
  2. Antidepressant drugs
  3. Mood stabilizers and Anticonvulsants
  4. Anti anxiety drugs
- F. Electroconvulsive Therapy and Newer Brain Stimulation Techniques
- G. Psychosurgery
- H. Assessing the Biological Approaches
- III. Psychological Approaches
  - A. Behavioral Theories of Abnormality
    1. Classical Conditioning
    2. Operant Conditioning
    3. Modeling and Observational Learning
    4. Behavioral Therapies
      - a. Systematic Desensitization
    5. Assessing Behavioral Approaches
  - B. Cognitive Theories of Abnormality
    1. Causal Attribution
    2. Global Assumptions
    3. Cognitive Therapies
      - a. CBT
      - b. Beck
    4. Assessing Cognitive Approaches
  - C. Psychodynamic Theories of Abnormality
    1. Psychoanalysis
      - a. Freud
    2. The Id, Ego, and Superego
    3. Psychosexual Stages
    4. Later Psychodynamic Theories
    5. Psychodynamic Theories
    6. Assessing Psychodynamic Approaches
  - D. Humanistic and Existential Theories of Abnormality
    1. Self-Actualization
      - a. Rogers
    2. Humanistic Therapy
      - a. Client Centered Therapy
    3. Assessing Humanistic Approaches
  - E. Family Systems Approaches
    1. Assessing Family Systems Approaches

- F. Third-Wave Approaches
  - 1. First wave – behavioral / second wave – cognitive / third wave - emotional
  - 2. Dialectical Behavior Therapy
  - 3. Acceptance and Commitment Therapy
  - 4. Assessing Third-Wave Approaches
- G. Using a New Technology to Deliver Treatment
- IV. Sociocultural Approaches
  - A. Cross-Cultural Issues in Treatment
  - B. Culturally Specific Therapies
  - C. Assessing Sociocultural Approaches
- V. Prevention Programs
- VI. Common Elements in Effective Treatments
- VII. Chapter Integration

## KEY TERMS

sociocultural approach	electroconvulsive therapy (ECT)
biological approach	psychosurgery
psychological approach	behavioral approaches
theory	classical conditioning
biopsychosocial approach	unconditioned stimulus (US)
diathesis-stress model	unconditioned response (UR)
cerebral cortex	conditioned stimulus (CS)
thalamus	conditioned response (CR)
hypothalamus	operant conditioning
limbic system	modeling
amygdala	observational learning
hippocampus	behavioral therapies
neurotransmitters	systematic desensitization therapy
synapse	desensitization
receptors	flooding
reuptake	cognitive theories
degradation	cognitions
endocrine system	causal attribution
hormone	global assumptions
pituitary	cognitive therapies
behavior genetics	cognitive-behavioral therapy (CBT)
polygenic	psychodynamic theories
epigenetics	psychoanalysis
antipsychotic drugs	catharsis
antidepressant drugs	repression
lithium	libido
anticonvulsants	id
antianxiety drugs	ego

superego  
unconscious  
preconscious  
conscious  
defense mechanisms  
psychosexual stages  
ego psychology  
object relations  
self psychology  
relational psychoanalysis  
collective unconscious  
psychodynamic therapies  
free association  
resistance  
transference

working through  
interpersonal therapy (IPT)  
humanistic theories  
self-actualization  
humanistic therapy  
client-centered therapy (CCT)  
reflection  
family systems theories  
family systems therapy  
third-wave approaches  
primary prevention  
secondary prevention  
tertiary prevention

## KEY CONCEPTS

- Biological theories of psychopathology typically attribute symptoms to structural abnormalities in the brain, disordered biochemistry, or faulty genes.
- Psychodynamic theories of psychopathology focus on unconscious conflicts that cause anxiety in the individual and result in maladaptive behavior.
- More recent psychodynamic theorists focus less on the role of unconscious impulses and more on the development of the individual's self-concept in the context of interpersonal relationships.
- The behaviorist theories of abnormality reject notions of unconscious conflicts and focus only on the rewards and punishments in the environment that shape and maintain behavior.
- Cognitive theories suggest that people's attributions for events, their perceptions of control and self-efficacy, and their global beliefs or assumptions influence the behaviors and emotions they have in reaction to situations.
- Humanist and existential theories suggest that all humans strive to fulfill their potential for good and to self-actualize.
- Interpersonal theories suggest that children develop internal models of the self and others through their attachments and relationships with early caregivers.
- Family systems theories suggest that psychopathology in individual family members is due to dysfunctional patterns of interaction within families that create and maintain the abnormal behaviors.
- Sociocultural theories suggest that societies create severe stresses for some people, then subcultures can sanction maladaptive ways of coping with these stresses.

## ONLINE LEARNING CENTER RESOURCES

### Lecture Suggestions and Class Activities

#### CONCEPT REVIEWS

**Biological Theories of Mental Disorders**  
**Psychological Theories of Mental Disorders**  
    **Key Concepts in Freudian Theory**  
    **Stimulus and Response in Classical Conditioning**  
**Sociocultural Approaches**  
**Prevention Programs**  
**Common Elements in Effective Treatments**  
**Chapter Integration**

#### LECTURE SUGGESTIONS

##### Is it Nature or Nurture?

Journalists Marc Peyser and Anne Underwood (1997) offer a critique of the nature/nurture controversy in accessible language and illustrated by examples related to personality and behavior of children. They cite a range of researchers and use shyness as an example of a behavioral predisposition widely believed to have a strong genetic component but is subject to environmental modification. The basic argument is that behavior is ultimately the result of dynamic transactions between genes and the environment, and that a gene is comparable to a blueprint rather than to a mold. This article can be used to draw examples of the ways in which genetic inheritance and environment do not affect behavior independently, but "work together to determine personality as intricately as Astaire and Rogers danced."

Robert Plomin (Azar, 1997), a longtime advocate of the role of genes in human development, said it is time to end the "nature versus nurture debate" (p. 1). While twin studies and adoption studies have provided evidence of the connection between genes and most human traits and behaviors, typically they only account for about half of the variance, while environment accounts for the rest. Thus, the discussion should no longer be whether "behaviors are . . . influenced by nature *or* nurture but by nature *and* nurture" (p. 1). Because genetic effects are powerful, and some studies have found them to increase over time, they cannot be ignored; however, since they do not account for the total variance in personality and behavior, neither can environmental factors be ignored.

##### Perspectives or Lenses for Understanding Psychological Disorders

Students are asked to suggest a "normal" or "typical" human behavior or developmental event, for example, "happiness," "childhood," or "puberty," and construct questions about the etiology of this phenomenon within the framework of each of the various approaches discussed in the text, that is, the biological, psychological, and social. The goal of this exercise is to demonstrate that the various approaches can be considered lenses from which one views and understands human behavior. These lenses both sensitize investigators to certain kinds of information, as well as filter out other kinds of information. These lenses or perspectives will be adopted, sometimes separately and other times in combination, throughout the course to understand the various psychological disorders.

### **Theories and Hypothesis**

Students may have difficulty differentiating theories from hypotheses. Tell them of some different theories you have and ask them to pull out testable hypotheses. For example, you can tell them that a researcher believed that frozen foods do not have calories. Calories are measures of heat and frozen food, by definition, can have no heat. Therefore, frozen foods are calorie free. Explain what events this theory might lead to: diets of frozen candy bars, ice cream, Starbucks frappuccinos frozen cookie dough, etc. that lead to weight loss. What is the theory? The hypotheses? How can they be tested?

### **Cultural Influences on Definitions of Abnormality**

The issue of culture and normality is much like the effect of religion and example you might use would be individuals who may partake of hallucinogens as part of their religious beliefs to allow them to be closer to god. Out of context, or in cultures that do not support this behavior, this could be seen as both criminal as well as abnormal.

## **CLASSROOM ACTIVITIES**

### **Jigsaw Technique for Small-Group Discussion of Contemporary Theories of Abnormality**

**Description:** In small groups, students apply the various approaches to understanding abnormal behavior and share their results with other groups.

**Time Needed:** Approximately 15 minutes.

**Materials Needed:** Access to the textbook.

**Procedure:** In the jigsaw technique (introduced in the "Classroom Activities" section for Chapter 1), students are first assigned to small groups, each of which is assigned a

specific task. Then the groups are rearranged such that the new groups are composed of individuals from each of the previous small groups, and the results of the first group are disseminated. For this activity, all students are first presented with a simple description of a fairly typical behavioral symptom or disorder—ideally, one that they would be able to relate to, for example, public speaking anxiety, test anxiety, or shyness (refer to the textbook, p. 32, in the “Taking Psychology Personally” section, for an example). Each group is assigned one of the theories listed in the chapter outline and asked to offer a hypothesis to explain the sign or symptom from their assigned theory. Groups are given 5 to 10 minutes to generate hypotheses. Then group members are assigned a number, one through five, and groups are reassembled according to number designation. So, all the Ones form a new group, all the Twos, all the Threes, and so on. The new groups now consist of members from each of the original groups. The newly formed groups are instructed to share their findings from their discussions in the original groups.

### **Freud’s Perspective vs. Modern Theory**

**Time Needed:** Approximately 15 minutes.

**Materials Needed:** Access to the textbook.

**Procedure:** In the 20<sup>th</sup> century, sex researchers grew to reject many of Freud’s ideas, and methodology. They critiqued the idea that sex was a disease and began to see themselves as part of a positive movement to reform the place of sexuality in society to make people healthier (Irvine, 2000). They saw sex as a measure of social progress and compared acceptance of sexual diversity to inventions such as the telephone and radio. Ask students to write down 2 ways they feel these assumptions have changed modern behaviors and perspectives. You can then read their anonymous answers to the class.

### **Shared Versus Non-Shared Environments**

**Time Needed:** Approximately 15 minutes.

**Materials Needed:** Access to the textbook.

**Procedure:** The purpose of this exercise is to enable students to realize that a combination of factors contributes to one’s environmental experiences. We automatically assume that because we live in the same house and have the same parents, we share the same environment with our siblings. But very few siblings would admit that they share similar life experiences. The older siblings will swear that the younger ones always get their way, and that their parents are not nearly as hard on their



younger brother or sister as they were on them. The younger ones believe the older siblings get to do everything, and they are treated like babies with all their restrictions. Then there are the middle children! Developmental psychologists know that it is very different to be an older brother than to have an older brother, and that despite living under the same roof, siblings' environments are not, in fact, the same. Ask students to consider how their environment growing up was different from their siblings, given you were raised in the same household. How many felt they had an overall easier time than their siblings? A harder time? Were their parents' reactions to them stricter, harsher, and more unfair? Conclude by emphasizing the varying circumstantial influences experienced by people functioning in very close proximity, and how this contributes to differences in behavior.

## CONNECT, LEARNSMART AND FACES INTERACTIVE

Please take an opportunity to look at “Connect” ([connect.mhhe.com](http://connect.mhhe.com)) as well as ([LearnSmart learnsmartadvantage.com](http://learnsmartadvantage.com)) for several videos available in the McGraw Hill library. LearnSmart is an adaptive learning tool that maximizes productivity and identifies the most important learning objectives for each student to master at a given point in time. Data-driven reports, found in the Reports tab under LearnSmart reports, highlight the concepts with which individual students are — or the entire class is — struggling. The tool is proven to improve academic performance, including higher retention rates and better grades. There are more videos and learning assets available on the website (<http://www.mhhe.com/nolen6e>). The instructor website provides access to CPS / clicker questions, faces interactive guides, images, and many other resources.

*Faces Interactive*, created by Arthur J. Kohn of Portland State University, is a unique web-based learning environment that provides students with an opportunity to observe and interact with real patients through a series of case studies on twelve different psychological disorders. Each case study takes students through five stages of a patient's experience: the diagnosis, case history, an interview, treatment, and assessment. Students are able to explore diagnostic processes, improve their understanding of clinical practice, and gain experience documenting their findings in a case study report project. After using *Faces Interactive* students will have a wealth of information about, and a humanistic outlook on, these disorders. (<http://www.mhhe.com/faces>).

McGraw Hill also has an extensive database of video clips available in the McGraw-Hill's Visual Assets Database for Life-Span Development (VAD 2.0) (<http://www.mhhe.com/vad>). This is an online database of videos for use in the developmental psychology classroom created specifically for instructors. You can customize classroom presentations by downloading the videos to your computer and

showing the videos on their own or inserting them into your course cartridge or PowerPoint presentations. All of the videos are available with or without captions.

McGraw-Hill also offers other video and multimedia materials, ask your local representative about the best products to meet your teaching needs.

## **VIDEOS**

### **The World of Abnormal Psychology**

“The World of Abnormal Psychology” is a video series that covers a wide range of topics such as ADHD, conduct disorders, autism, and separation disorders and can be found at: <http://www.learner.org/resources/series60.html> or through the McGraw Hill Higher Education General Resources for Students and Faculty Annenberg / CPB projects link <http://www.mhhe.com/socscience/psychology/psychonline/general.html>.

### **Discovering Psychology: Updated Edition**

“Discovering Psychology: Updated Edition” is a general series with several clips that can be used in a human development course and can be found at: <http://www.learner.org/resources/series138.html> or through the McGraw Hill Higher Education General Resources for Students and Faculty Annenberg / CPB projects link <http://www.mhhe.com/socscience/psychology/psychonline/general.html>.

### **The Mind**

“The Mind” is a series that looks at myriad factors relevant to cognitive, biological, and developmental psychology. The entire series can be found at: <http://www.learner.org/resources/series150.html> or through the McGraw Hill Higher Education General Resources for Students and Faculty Annenberg / CPB projects link <http://www.mhhe.com/socscience/psychology/psychonline/general.html>.

### **The Brain: Teaching Modules**

“The Brain” is a series that looks at myriad factors relevant to cognitive, biological, and developmental psychology. The entire series can be found at: <http://www.learner.org/resources/series142.html> or through the McGraw Hill Higher Education General Resources for Students and Faculty Annenberg / CPB projects link <http://www.mhhe.com/socscience/psychology/psychonline/general.html>.

### **Seasons of Life**

“Seasons of Life” is a series that covers various stages of life and is wonderful for a human development class. The series can be found at: <http://www.learner.org/resources/series54.html> or through the McGraw Hill Higher Education General Resources for Students and Faculty Annenberg / CPB projects link <http://www.mhhe.com/socscience/psychology/psychonline/general.html>

## ONLINE LEARNING CENTER RESOURCES

The Online Learning Center can be found at: <http://www.mhhe.com/nolen6e>.

### NOVELS, BIOGRAPHIES, AND NONFICTION TITLES OF NOTE

Breggin, Peter R. (1991). *Toxic Psychiatry*. New York: St. Martin's Press.

Dr. Peter Breggin, described as ‘the conscience of American psychiatry,’ speaks out on why therapy, empathy, and love must replace the drugs, electroshock, and biochemical theories of the ‘New Psychiatry’ (jacket copy).

Lewontin, R. C., Rose, S., & Kamin, L. (1984). *Not in Our Genes: Biology, Ideology, and Human Nature*. New York: Pantheon Books.

Three eminent scientists analyze the scientific, social, and political roots of biological determinism.

Whybrow, Peter C. (1997). *A Mood Apart: The Thinker's Guide to Emotion and its Disorders*. New York: HarperCollins.

A terrific book for professionals and the public on mood disorders, weaving a tapestry of personally treated cases, with all of their human complexities and an up-to-date scientific understanding of mood disorders, including both the sociocultural and the biomedical components (*Contemporary Psychology*).

### REFERENCES

Azar, B. (1997, May). Nature, nurture: Not mutually exclusive. *The APA Monitor*, 28(5), 1, 28.

Peyser, M., & Underwood, A. (1997). Is it nature or nurture? *Newsweek*,

Spring/Summer 1997, pp. 60-63.