

Disorders of Childhood and Adolescence

TOPIC OVERVIEW

Childhood and Adolescence

Childhood Anxiety Problems

Childhood Anxiety Disorders
Treatment for Childhood Anxiety Disorders

Childhood Mood Problems

Major Depressive Disorders
Bipolar Disorder

Oppositional Defiant Disorder and Conduct Disorder

What Are the Causes of Conduct Disorder?
How Do Clinicians Treat Conduct Disorder?

Attention-Deficit/Hyperactivity Disorder

What Are the Causes of ADHD?
How Do Clinicians Assess ADHD?
How Is ADHD Treated?
Multicultural Factors and ADHD

Elimination Disorders

Enuresis
Encopresis

Long-Term Disorders That Begin in Childhood

Pervasive Developmental Disorders
Mental Retardation

Putting It Together: Clinicians Discover Childhood and Adolescence

LECTURE OUTLINE

I. DISORDERS OF CHILDHOOD AND ADOLESCENCE

- A. Abnormal functioning can occur at any time in life
- B. Some patterns of abnormality, however, are more likely to emerge during particular periods

II. CHILDHOOD AND ADOLESCENCE

- A. Theorists often view life as a series of stages on the road from birth to death
 - 1. Freud proposed that each child passes through the same five stages of psychosexual development—oral, anal, phallic, latency, and genital
 - 2. Eriksson added the stage of “old age”
 - 3. Although theorists may disagree with the details of these schemes, most agree with the idea that we confront key pressures during each stage in life and either grow or decline depending on how we meet those pressures
- B. People often think of childhood as a carefree and happy time—yet it also can be frightening and upsetting
 - 1. Children of all cultures typically experience at least some emotional and behavioral problems as they encounter new people and situations
 - 2. Surveys indicate that *worry* is a common experience:
 - a. Bedwetting, nightmares, temper tantrums, and restlessness are other problems experienced by many children
- C. Adolescence also can be a difficult period
 - 1. Physical and sexual changes, social and academic pressures, personal doubts, and temptation cause many teenagers to feel anxious, confused, and depressed
 - 2. Along with these common psychological difficulties, at least one-fifth of all children and adolescents in North America also experience a diagnosable psychological disorder
 - a. Boys with disorders outnumber girls, even though most of the adult psychological disorders are more common in women
- D. Certain disorders of children—childhood anxiety disorders and childhood depression—have adult counterparts
 - 1. Other childhood disorders—elimination disorders, for example—usually disappear or radically change form by adulthood
 - 2. There also are disorders that begin in birth or childhood and persist in stable forms into adult life
 - a. These include mental retardation and autism

III. CHILDHOOD ANXIETY PROBLEMS

- A. Anxiety is, to a degree, a normal and common part of childhood
 - 1. Since children have had fewer experiences than adults, their world is often new and scary
 - 2. Because they are highly dependent on the parents for emotional support and guidance, children may also be affected greatly by parental problems or inadequacies
 - 3. There also is genetic evidence that some children are prone to an anxious temperament
- B. Childhood Anxiety Disorders
 - 1. For some children, such anxieties become chronic and debilitating, interfering with their daily lives and their ability to function appropriately; they may be suffering from an anxiety disorder
 - 2. Surveys indicate that between 10 and 21 percent of all children and adolescents display an anxiety disorder

3. Some of these disorders are similar to their adult counterparts, but more often they take on a somewhat different character due to cognitive and other limitations
 - a. Typically, anxiety disorders of young children are dominated by behavioral and somatic symptoms
 - b. They tend to center on specific, sometimes imaginary, objects and events
 - c. Separation anxiety disorder, one of the most common childhood anxiety disorders, follows this profile and is displayed by 4 percent of all children
 - d. A separation anxiety disorder may further take the form of a school phobia or school refusal—a common problem in which children fear going to school and often stay home for a long period
- C. Treatments for Childhood Anxiety Disorders
 1. Despite the high prevalence of these disorders, most anxious children go untreated
 2. Among the children who do receive treatment, psychodynamic, behavioral, cognitive, cognitive-behavioral, family, and group therapies, separately or in combination, have been applied most often—each with some degree of success
 3. Clinicians have also used drug therapy in some cases, often in combination with psychotherapy, but drug therapy for these disorders has begun only recently to receive much research attention
 4. Because children typically have difficulty recognizing and understanding their feelings and motives, many therapists, particularly psychodynamic therapists, use play therapy as part of treatment

IV. CHILDHOOD MOOD PROBLEMS

- A. Major Depressive Disorder
 1. Around 2 percent of children and 9 percent of adolescents currently experience major depressive disorder; as many as 15 percent of adolescents experience at least one depressive episode
 2. As with anxiety disorders, very young children lack the cognitive skill that helps produce clinical depression, thus accounting for the low rate of depression among the very young
 3. Depression in the young may be triggered by negative life events (particularly losses), major changes, rejection, or ongoing abuse
 4. Some of the features of childhood depression differ from those that characterize adult depression
 5. Clinical depression is much more common among teenagers
 - a. Suicidal thoughts and attempts are particularly common
 6. While there is no difference between rates of depression in boys and girls before the age of 13, girls are twice as likely as boys to be depressed by the age of 16
 - a. Several factors have been suggested, including hormonal changes, increased stressors, and increased emotional investment in social and intimate relationships
 - b. Another factor that has received attention is teenage girls' growing dissatisfaction with their bodies
 7. Throughout the 1990s it was generally believed that childhood and teenage depression would respond well to the same treatments that have been of help to depressed adults—cognitive-behavioral therapy, interpersonal approaches, and antidepressant drugs—and many studies indicated the effectiveness of such approaches
 - a. However, some recent studies and events have raised questions about these approaches and findings, especially in relation to the use of antidepressant drugs, highlighting again the importance of research, particularly in the treatment realm
- B. Bipolar Disorder
 1. For decades, conventional clinical wisdom held that bipolar disorder is exclusively an adult mood disorder, whose earliest age of onset is the late teens

2. However, since the mid-1990s, clinical theorists have begun to believe that many children display bipolar disorder
3. Most theorists believe that the growing numbers of children diagnosed with this disorder reflect not an increase in prevalence but a new diagnostic trend
4. Other theorists believe the diagnosis is currently being overapplied to children and adolescents
 - a. They suggest the label has become a clinical “catchall” that is being applied to almost every explosive, aggressive child
5. The outcome of the debate is important, particularly because the current shift in diagnoses has been accompanied by an increase in the number of children who receive adult medications for bipolar disorder
 - a. Few of these drugs have been tested on and approved specifically for use in children
 - b. This is an issue that clearly requires careful study

V. OPPOSITIONAL DEFIANT DISORDER AND CONDUCT DISORDER

- A. Children consistently displaying extreme hostility and defiance may qualify for a diagnosis of *oppositional defiant disorder*
 1. This disorder is characterized by repeated arguments with adults, loss of temper, anger, and resentment
 2. Children with this disorder ignore adult requests and rules, try to annoy people, and blame others for their mistakes and problems
 3. As many as 10 percent of children qualify for this diagnosis
 4. The disorder is more common in boys than girls before puberty but equal in both sexes after puberty
- B. Children with *conduct disorder*, a more severe problem, repeatedly violate the basic rights of others
 1. They often are aggressive and may be physically cruel and violent to people and animals
 2. Many steal from, threaten, or harm their victims, committing such crimes as shoplifting, vandalism, mugging, and armed robbery
 3. Conduct disorder usually begins between 7 and 15 years of age
 4. As many as 10 percent of children, three-quarters of them boys, qualify for this diagnosis
 5. Children with a mild conduct disorder may improve over time, but severe cases frequently continue into adulthood and develop into antisocial personality disorder or other psychological problems
- C. Many clinical theorists believe that there are actually several kinds of conduct disorder
 1. One team distinguishes four patterns:
 - a. Overt-destructive
 - b. Overt-nondestructive
 - c. Covert-destructive
 - d. Covert-nondestructive
 2. Some individuals display only one of these patterns, while others display a combination of them
 - a. It may be that the different patterns have different causes
- D. Other researchers distinguish yet another pattern of aggression found in certain cases of conduct disorder—relational aggression—in which individuals are socially isolated and primarily display social misdeeds
 1. Relational aggression is more common among girls than boys
- E. More than one-third of boys and one-half of girls with conduct disorder also display attention-deficit/hyperactivity disorder (ADHD)
 1. In most cases, ADHD is believed to precede and help cause the conduct disorder
- F. Many children with conduct disorder also experience depression
 1. In such cases, the conduct disorder typically precedes the onset of depressive symptoms

2. This combination of symptoms places the individual at higher risk for suicide
- G. Many children with conduct disorder are suspended from school, placed in foster homes, or incarcerated
 1. When children between the ages of 8 and 18 break the law, the legal system often labels them juvenile delinquents
- H. What are the causes of conduct disorder?
 1. Many cases of conduct disorder have been linked to genetic and biological factors, drug abuse, poverty, traumatic events, and exposure to violent peers or community violence
 2. They have most often been tied to troubled parent-child relationships, inadequate parenting, family conflict, marital conflict, and family hostility
- I. How do clinicians treat conduct disorder?
 1. Because disruptive behavior patterns become more locked with age, treatments for conduct disorder are generally most effective with children younger than 13
 2. A number of interventions have been developed, but none of them alone is the answer for this difficult problem
 - a. Given that conduct disorder affects all spheres of a child's life, today's clinicians are increasingly combining several approaches into a wide-ranging treatment program
 3. Given the importance of family factors in conduct disorder, therapists often use family interventions
 - a. One such approach is called parent-child interaction therapy
 - b. A related family intervention is video tape modeling
 - c. When children reach school age, therapists often use a family intervention called parent management training
 - d. These treatments often have achieved a measure of success
 4. Other sociocultural approaches, such as community residential treatment programs and programs at school, have also helped some children improve
 - a. One such approach is treatment foster care
 5. In contrast to these other approaches, institutionalization in "juvenile training centers" has not met with much success and may, in fact, strengthen delinquent behavior
 6. Treatments that focus primarily on the child with conduct disorder, particularly cognitive-behavioral interventions, have achieved some success in recent years
 - a. In problem-solving skills training, therapists combine modeling, practice, role-playing, and systematic rewards
 - b. Another child-focused approach, Anger Coping and Coping Power Program, has children participate in group sessions that teach them to manage anger more effectively
 - c. Studies indicate that these approaches do reduce aggressive behaviors and prevent substance use in adolescence
 7. Recently, drug therapy also has been used
 8. It may be that the greatest hope for reducing the problem of conduct disorder lies in *prevention* programs that begin in early childhood
 - a. These programs try to change unfavorable social conditions before a conduct disorder is able to develop

VI. ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

- A. Children who display attention-deficit/hyperactivity disorder (ADHD) have great difficulty attending to tasks or behave overactively and impulsively, or both
 1. The primary symptoms of ADHD may feed into one another, but often one of the symptoms stands out more than the other
- B. Problems common to the disorder:
 1. Learning or communication problems
 2. Poor school performance
 3. Difficulty interacting with other children

4. Misbehavior, often serious
5. Mood or anxiety problems
- C. Around 5 percent of schoolchildren display ADHD, as many as 90 percent of them boys
 1. Those whose parents have had ADHD are more likely than others to develop it
 2. This disorder usually persists through childhood but many children show a lessening of symptoms as they move into mid-adolescence
 3. Between 35 and 60 percent continue to have ADHD as adults
- D. What are the causes of ADHD?
 1. Clinicians generally consider ADHD to have several interacting causes including:
 - a. Biological causes, particularly abnormal dopamine activity and abnormalities in the frontal-striatal regions of the brain
 - b. High levels of stress
 - c. Family dysfunctioning
 2. Sociocultural theorists also point out that ADHD symptoms and a diagnosis of ADHD may themselves create interpersonal problems and produce additional symptoms in the child
 3. Three other explanations have received considerable press:
 - a. ADHD typically is caused by sugar or food additives
 - b. ADHD results from environmental toxins such as lead
 - c. Excessive exposure to television can contribute to ADHD
- E. How do clinicians assess ADHD?
 1. ADHD is a difficult disorder to assess
 - a. Ideally, the child's behavior should be observed in several environmental settings because symptoms must be present across multiple settings to meet DSM-IV-TR's criteria
 - b. It also is important to obtain reports of the child's symptoms from their parents and teachers
 - c. Clinicians also commonly employ diagnostic interviews, rating scales, and psychological tests
- F. How is ADHD treated?
 1. There is heated disagreement about the most effective treatment for the disorder
 2. The most commonly applied approaches are drug therapy, behavioral therapy, or a combination
 3. Millions of children and adults with ADHD are currently treated with methylphenidate (Ritalin), a stimulant drug that has been available for decades
 - a. These drugs sometimes have a quieting effect on as many as 80 percent of children with ADHD and increase their ability to solve problems, perform in school, and control aggression
 - b. As many as 10 to 12 percent of all American boys may take Ritalin for ADHD, and the number of girls taking it is growing
 - c. In recent years, certain other stimulant drugs have also been found useful
 - d. However, some clinicians worry about the possible long-term effects of the drugs
 - e. Extensive investigations indicate that ADHD is overdiagnosed in the United States, so many children who are receiving Ritalin may, in fact, have been inaccurately diagnosed
 - f. On the positive side, Ritalin is apparently very helpful for those who do have the disorder and most studies indicate its safety
 4. Behavioral therapy also is applied widely in cases of ADHD
 - a. Parents and teachers learn how to apply operant conditioning techniques to change behavior
 - b. These treatments often have been helpful, especially when combined with drug therapy
 5. Because children with ADHD often display other (comorbid) psychological disorders, researchers have further tried to determine which treatments work best for different combinations of disorders.
- G. Multicultural factors and ADHD

1. Race seems to come into play with regard to ADHD
 - a. A number of studies indicate that African American and Hispanic American children with significant attention and activity problems are less likely than white American children to be assessed for ADHD, receive an ADHD diagnosis, or undergo treatment for the disorder
 - b. Children from racial minorities who do receive a diagnosis are less likely than white children to be treated with interventions that seem to be the most helpful, including the promising (but more expensive) long-acting stimulant drugs
2. In part, racial differences in diagnosis and treatment are tied to economic factors
3. A growing number of clinical theorists further believe that social bias and stereotyping may contribute to the racial differences seen in the diagnosis and treatment of ADHD
4. While many of today's clinical theorists correctly alert us that ADHD may be generally overdiagnosed and overtreated, it is important that they also recognize that children from certain segments of society may actually be underdiagnosed and undertreated

VII. ELIMINATION DISORDERS

- A. Children with elimination disorders repeatedly urinate or pass feces in their clothes, in bed, or on the floor
 1. They already have reached an age at which they are expected to control these bodily functions
 2. These symptoms are not caused by physical illness
- B. Enuresis
 1. Enuresis is repeated involuntary (or in some cases intentional) bedwetting or wetting of one's clothes
 - a. It typically occurs at night during sleep but may also occur during the day
 2. Children must be at least 5 years of age to receive this diagnosis
 3. The problem may be triggered by a stressful event
 4. The prevalence of the disorder decreases with age
 5. Those with enuresis typically have a close relative who has had or will have the same disorder
 6. Research has not favored one explanation for the disorder over others
 - a. Psychodynamic theorists explain it as a symptom of broader anxiety and underlying conflicts
 - b. Family theorists point to disturbed family interactions
 - c. Behaviorists often view it as the result of improper, unrealistic, or coercive toilet training
 - d. Biological theorists suspect the physical structure of the urinary system develops more slowly in some children
 7. Most cases of enuresis correct themselves without treatment
 - a. Therapy, particularly behavior therapy, can speed up the process
- C. Encopresis
 1. Encopresis, repeatedly defecating in one's clothing, is less common than enuresis and less well researched
 2. The problem:
 - a. Is usually involuntary
 - b. Seldom occurs during sleep
 - c. Starts after the age of 4
 - d. Is more common in boys than girls
 3. Encopresis causes intense social problems, shame, and embarrassment
 4. Cases may stem from stress, constipation, improper toilet training, or a combination
 5. The most common treatments are behavioral and medical approaches, or combinations of the two
 - a. Family therapy also has been helpful

VIII. LONG-TERM DISORDERS THAT BEGIN IN CHILDHOOD

- A. Two groups of disorders that emerge during childhood are likely to continue unchanged throughout a person's life:
 1. Pervasive Developmental Disorders
 2. Mental retardation
- B. Clinicians have developed a range of treatment approaches that can make a major difference in the lives of people with these problems
- C. Pervasive Developmental Disorders
 1. Pervasive developmental disorders are a group of disorders marked by impaired social interactions, unusual communications, and inappropriate responses to stimuli in the environment
 2. The group includes autistic disorder, Asperger's disorder, Rett's disorder, and childhood disintegrative disorder
 - a. Because autistic disorder initially received so much more attention than the others, these disorders are often referred to as autistic-spectrum disorders
- D. Autistic Disorders
 1. Autistic disorder, or autism, was first identified in 1943
 2. Children with this disorder are extremely unresponsive to others, uncommunicative, repetitive, and rigid
 3. Symptoms appear early in life, before age 3
 4. There has been a steady increase in the number of children diagnosed and it appears that at least one in 600 and maybe as many as one in 160 children display the disorder
 5. Around 80 percent of all cases appear in boys
 6. As many as 90 percent of children with autism remain severely disabled into adulthood and are unable to lead independent lives
 - a. Even the highest-functioning adults with autism typically have problems in social interactions and communication and have restricted interests and activities
- E. What are the features of autism?
 1. The central feature of autism is the individual's lack of responsiveness, including extreme aloofness and lack of interest in people
 2. Language and communication problems take various forms
 - a. One common speech peculiarity is *echolalia*, the exact phrasing spoken by others
 - b. Another is pronominal reversal, or confusion of pronouns
 3. Autism also is marked by limited imaginative play and very repetitive and rigid behavior
 - a. This has been termed a "perseveration of sameness"
 - b. Many sufferers become strongly attached to particular objects—plastic lids, rubber bands, buttons, water—and may collect, carry, or play with them constantly
 4. The motor movements of people with autism may be unusual
 - a. Often called "self-stimulatory" behaviors, some children jump, flap their arms, and make faces
 - b. Children with autism also may engage in self-injurious behaviors
 - c. Children may at times seem overstimulated and/or understimulated by their environments
- F. Asperger's Disorder
 1. Children with Asperger's disorder (or syndrome) experience the kinds of social deficits, impairments in expressiveness, idiosyncratic interests, and restricted and repetitive behaviors that characterize children with autism, but, in contrast, children with Asperger's disorder often have normal intellectual, adaptive, and language skills
 2. Clinical research suggests that there may be several subtypes of Asperger's disorder, each having a particular set of symptoms, including
 - a. Rule boys

- b. Logic boys
- c. Emotion boys
- 3. Asperger's disorder appears to be more prevalent than autism
 - a. Approximately 1 in 250 individuals displays this pattern, with 80 percent of them boys
- 4. It is important to diagnose and treat the disorder early so the individual has a better chance of being successful at school and living independently
- G. What are the causes of pervasive developmental disorders?
 - 1. Much more research has been conducted on autism than on Asperger's disorder or other pervasive developmental disorders
 - 2. Currently, many clinicians and researchers believe that other disorders are caused by factors similar to those responsible for autism
 - 3. A variety of explanations for autism have been offered
 - a. Sociocultural explanations are now seen as having been overemphasized
 - b. More recent work in the psychological and biological spheres has persuaded clinical theorists that cognitive limitations and brain abnormalities are the primary causes of the disorder
 - 4. Sociocultural causes
 - a. Theorists initially thought that family dysfunction and social stress were the primary causes of autism
 - (a) Kanner argued that particular personality characteristics of parents created an unfavorable climate for development—"Refrigerator parents"
 - (b) These claims had enormous influence on the public and the self-image of parents but research totally failed to support this model
 - b. Some clinicians proposed a high degree of social and environmental stress, a theory also unsupported by research
 - 5. Psychological causes
 - a. According to some theorists, people with autism have a central perceptual or cognitive disturbance
 - (a) One theory holds that individuals fail to develop a theory of mind—an awareness that other people base their behaviors on their own beliefs, intentions, and other mental states, not on information they have no way of knowing
 - (b) Repeated studies have shown that people with autism have this kind of "mindblindness"
 - b. It has been theorized that early biological problems prevented proper cognitive development
 - 6. Biological causes
 - a. While a detailed biological explanation for autism has not yet been developed, promising leads have been uncovered
 - (a) Examinations of relatives keeps suggesting a genetic factor in the disorder
 - (i) Prevalence rates are higher among siblings and highest among identical twins
 - (ii) Chromosomal abnormalities have been discovered in 10 to 12 percent of people with the disorder
 - (b) Some studies have linked autism to prenatal difficulties or birth complications
 - (c) Some theorists have proposed that a postnatal event—the MMR vaccine—might produce autism in some children although subsequent research has found no link
 - (d) Researchers also have identified specific biological abnormalities that may contribute to the disorder, particularly in the cerebellum
 - b. Many researchers believe that autism may have multiple biological causes
 - c. Perhaps all relevant biological factors lead to a common problem in the brain—a "final common pathway"—that produces the features of the disorder

- H. How do clinicians and educators treat pervasive developmental disorders?
1. Treatment can help people with autism adapt better to their environments, although no treatment yet known totally reverses the autistic pattern
 2. Treatments of particular help are behavioral therapy, communication training, parent training, and community integration.
 3. In addition, psychotropic drugs and certain vitamins have sometimes helped when combined with other approaches
 - a. Behavioral therapy
 - (a) Behavioral approaches have been used in cases of autism to teach new, appropriate behaviors, including speech, social skills, classroom skills, and self-help skills, while reducing negative ones
 - (i) Most often therapists use modeling and operant conditioning
 - (b) Therapies ideally are applied when people with autism are young
 - (c) Given the recent increases in the prevalence of autism, many school districts are now trying to provide education and training for autistic children in special classes; most school districts, however, remain ill equipped to meet the profound needs of these students
 - (d) Although significantly impaired, children with Asperger's disorder have less profound educational and treatment needs
 - b. Communication training
 - (a) Even when given intensive behavioral treatment, half of the people with autism remain speechless
 - (b) Many therapists include sign language and simultaneous communication—a method of combining sign language and speech—into therapy
 - (c) They also may use augmentative communication systems, such as “communication boards” or computers that use pictures, symbols, or written words to represent objects or needs
 - (d) Such programs now use child-initiated interactions to help improve communication skills
 - c. Parent training
 - (a) Today's treatment programs involve parents in a variety of ways
 - (i) For example, behavioral programs train parents so they can apply behavioral techniques at home
 - (b) In addition, individual therapy and support groups are becoming more available to help parents deal with their own emotions and needs
 - d. Community integration
 - (a) Many of today's school-based and home-based programs for autism teach self-help; self-management; and living, social, and work skills
 - (b) In addition, greater numbers of group homes and sheltered workshops are available for teens and young adults with autism
 - (i) These programs help individuals become a part of their community and also reduce the concerns of aging parents

IX. MENTAL RETARDATION

- A. The term “mental retardation” has been applied to a varied population
1. In recent years, the less stigmatizing term “intellectual disability” has become synonymous with mental retardation in many clinical settings
 2. As many as three of every 100 persons meets the criteria for this disorder
 - a. Around three-fifths of them are male and the vast majority are considered *mildly* retarded
- B. According to DSM-IV-TR, people should receive a diagnosis of mental retardation when they display general intellectual functioning that is well below average, in combination with poor adaptive behavior
1. IQ must be 70 or below

2. The person must have difficulty in such areas as communication, home living, self-direction, work, or safety
 3. Symptoms must appear before age 18
- C. Assessing intelligence
1. Educators and clinicians administer intelligence tests to measure intellectual functioning
 2. These tests consist of a variety of questions and tasks that rely on different aspects of intelligence
 - a. Having difficulty in one or two of these subtests or areas of functioning does not necessarily reflect low intelligence
 - b. An individual's overall test score, or intelligence quotient (IQ), is thought to indicate general intellectual ability
 3. Many theorists have questioned whether IQ tests are indeed valid
 - a. Intelligence tests also appear to be socioculturally biased
 4. If IQ tests do not always measure intelligence accurately and objectively, then the diagnosis of mental retardation also may be biased
 - a. That is, some people may receive the diagnosis partly because of test inadequacies, cultural difference, discomfort with the testing situation, or the bias of the tester
- D. Assessing adaptive functioning
1. Diagnosticians cannot rely solely on a cutoff IQ score of 70 to determine whether a person suffers from mental retardation
 - a. Several scales, such as the Vineland and AAMR adaptive behavior scales, have been developed to assess adaptive behavior
 - b. For proper diagnosis, clinicians should observe the functioning of each individual in his or her everyday environment, taking both the person's background and the community standards into account
- E. What are the features of mental retardation?
1. The most consistent sign of mental retardation is that the person learns very slowly
 - a. Other areas of difficulty are attention, short-term memory, planning, and language
 - b. Those who are institutionalized with mental retardation are particularly likely to have these limitations
 2. DSM-IV-TR describes four levels of mental retardation:
 - a. Mild (IQ 50–70)
 - b. Moderate (IQ 35–49)
 - c. Severe (IQ 20–34)
 - d. Profound (IQ below 20)
 3. In contrast, the American Association of Mental Retardation prefers to distinguish different kinds of mental retardation according to the level of support the person needs in various aspects of his or her life—intermittent, limited, extensive, or pervasive
- F. Mild retardation
1. Some 80–85 percent of all people with mental retardation fall into the category of mild retardation (IQ 50–70)
 2. They sometimes are called “educably retarded” because they can benefit from schooling
 3. People with mild retardation typically need assistance but can work in unskilled or semiskilled jobs
 4. Intellectual performance seems to improve with age
 5. Research has linked mild mental retardation mainly to sociocultural and psychological causes, particularly:
 - a. Poor and unstimulating environments
 - b. Inadequate parent-child interactions

- c. Insufficient early learning experiences
- 6. Although these factors seem to be the leading causes of mild mental retardation, at least some biological factors also may be operating
 - a. Studies have implicated mother's moderate drinking, drug use, or malnutrition during pregnancy in cases of mild retardation
- G. Moderate, severe, and profound retardation
 - 1. Approximately 10 percent of persons with mental retardation function at a level of moderate retardation (IQ 35–49)
 - 2. They can care for themselves and benefit from vocational training
 - 3. Approximately 3–4 percent of persons with mental retardation function at a level of severe retardation (IQ 20–34)
 - 4. They usually require careful supervision and can perform only basic work tasks
 - 5. About 1 percent of persons with mental retardation function at a level of profound retardation (IQ below 20)
 - 6. With training they may learn or improve basic skills but require a very structured environment
 - 7. Severe and profound levels of mental retardation often appear as part of larger syndromes that include severe physical handicaps
- H. What are the causes of mental retardation?
 - 1. The primary causes of moderate, severe, and profound retardation are biological, although people who function at these levels are also greatly affected by their family and social environment
 - a. Sometimes genetic factors are the roots of these biological problems
 - b. Other biological causes come from unfavorable conditions that occur before, during, or after birth
 - 2. Chromosomal causes
 - a. The most common chromosomal disorder leading to mental retardation is Down syndrome
 - b. Fewer than one of every 1000 live births result in Down Syndrome, but this rate increases greatly when the mother's age is over 35
 - c. Several types of chromosomal abnormalities may cause Down syndrome, but the most common is trisomy 21
 - d. Fragile X syndrome is the second most common chromosomal cause of mental retardation
 - 3. Metabolic causes
 - a. In metabolic disorders, the body's breakdown or production of chemicals is disturbed
 - b. The metabolic disorders that affect intelligence and development typically are caused by the pairing of two defective *recessive* genes, one from each parent
 - (a) Examples include:
 - (i) Phenylketonuria (PKU)
 - (ii) Tay-Sachs disease
 - 4. Prenatal and birth-related causes
 - a. As a fetus develops, major physical problems in the pregnant mother can threaten the child's healthy development
 - (a) Low iodine = cretinism
 - (b) Alcohol use = fetal alcohol syndrome (FAS)
 - (c) Certain maternal infections during pregnancy (e.g., rubella, syphilis)
 - b. Birth complications also can lead to mental retardation, particularly a prolonged period without oxygen (anoxia)
 - 5. Childhood problems
 - a. After birth, particularly up to age 6, certain injuries and accidents can affect intellectual functioning
 - (a) Examples include poisoning, serious head injury, excessive exposure to x-rays, and excessive use of certain chemicals, minerals, and/or drugs

- (b) In addition, certain infections, such as meningitis and encephalitis, can lead to mental retardation if they are not diagnosed and treated in time
- I. Interventions for people with mental retardation
1. The quality of life achieved by people with mental retardation depends largely on sociocultural factors
 - a. Thus, intervention programs try to provide comfortable and stimulating residences, social and economic opportunities, and a proper education
 2. What is the proper residence?
 - a. Until recently, parents of children with mental retardation would send them to live in public institutions—state schools—as early as possible
 - (a) These overcrowded institutions provided basic care, but residents were neglected, often abused, and isolated from society
 - (b) During the 1960s and 1970s, the public became more aware of these sorry conditions, and, as part of the broader deinstitutionalization movement, demanded that many people be released from these schools
 - b. People with mental retardation faced similar challenges by deinstitutionalization as people with schizophrenia
 - c. Since deinstitutionalization, reforms have led to the creation of small institutions and other community residences (group homes, halfway houses, local branches of larger institutions, and independent residences) that teach self-sufficiency, devote more time to patient care, and offer education and medical services
 - (a) These programs follow the principle of normalization—they try to provide living conditions similar to those enjoyed by the rest of society
 - d. Today the vast majority of children with mental retardation live at home rather than in an institution
 - (a) Most people with mental retardation, including almost all with mild mental retardation, now spend their adult lives either in the family home or in a community residence
 3. Which educational programs work best?
 - a. Because early intervention seems to offer such great promise, educational programs for individuals with mental retardation may begin during the earliest years
 - b. At issue are special education vs. mainstream classrooms
 - (a) In special education, children with mental retardation are grouped together in a separate, specially designed educational program
 - (b) Mainstreaming places them in regular classes with nonretarded students
 - (c) Neither approach seems consistently superior
 - (d) Teacher preparedness is a factor that plays into decisions about mainstreaming
 - c. Many teachers use operant conditioning principles to improve the self-help, communication, social, and academic skills of individuals with mental retardation
 - (a) Many schools also employ token economy programs
 4. When is therapy needed?
 - a. People with mental retardation sometimes experience emotional and behavioral problems
 - b. As many as 25 percent have a diagnosable psychological disorder other than mental retardation
 - c. Furthermore, some suffer from low self-esteem, interpersonal problems, and adjustment difficulties
 - d. These problems are helped to some degree with individual or group therapy, and medication sometimes is prescribed
 5. How can opportunities for personal, social, and occupational growth be increased?
 - a. People need to feel effective and competent in order to move forward in life

- (a) Those with mental retardation are most likely to achieve these feelings if their communities allow them to grow and make many of their own choices
- b. Socializing, sex, and marriage are difficult issues for people with mental retardation and their families
 - (a) With proper training and practice, the individuals can learn to use contraceptives and carry out responsible family planning
 - (b) The National Association for Retarded Citizens offers guidance in these matters
 - (c) Some clinicians have developed dating skills programs
- c. Some states restrict marriage for people with mental retardation
 - (a) These laws rarely are enforced
 - (b) Between one-fourth and one-half of all people with mild mental retardation eventually marry
- d. Finally, adults with mental retardation need the financial security and personal satisfaction that come from holding a job
 - (a) Many can work in sheltered workshops but there are too few training programs available
 - (b) Additional programs are needed so that more people with mental retardation may achieve their full potential, as workers and as human beings

LEARNING OBJECTIVES

1. Describe childhood anxiety disorders and their treatment.
2. Describe the childhood mood problems of major depressive disorder and bipolar disorder.
3. Describe the prevalence, symptoms, causes, and treatments of oppositional defiant disorder and conduct disorder.
4. Describe the prevalence, symptoms, causes, and treatments of attention-deficit/hyperactivity disorder (ADHD).
5. Name and describe the elimination disorders. Discuss possible causes and treatments.
6. Describe the types and symptoms of pervasive developmental disorders. Discuss the various etiologies and treatments that have been proposed.
7. Describe the prevalence of the various types of mental retardation, and discuss the environmental, genetic, and biological factors that contribute to mental retardation. Describe and evaluate treatments and therapies for individuals with mental retardation, including normalization programs and behavioral techniques.

KEY TERMS

amniocentesis
 Asperger's disorder
 attention-deficit/
 hyperactivity disorder
 (ADHD)
 augmentative communication
 system

autistic disorder, or autism
 cerebellum
 conduct disorder
 dating skills program
 deinstitutionalization
 Down syndrome
 echolalia

encopresis
 enuresis
 fetal alcohol syndrome
 fragile X syndrome
 intelligence quotient (IQ)
 mainstreaming
 mental retardation

methylphenidate (Ritalin)
 mild retardation
 moderate retardation
 normalization
 oppositional defiant disorder
 perseveration of sameness
 pervasive developmental
 disorder
 phenylketonuria (PKU)

play therapy
 profound retardation
 recessive genes
 self-injurious behavior
 self-stimulatory behavior
 separation anxiety disorder
 severe retardation
 sheltered workshop
 simultaneous communication

special education
 state school
 Tay-Sachs disease
 theory of mind
 token economy program
 trisomy 21

MEDIA RESOURCES

Abnormal Psychology Student Tool Kit

Produced and edited by Ronald J. Comer, Princeton University and Gregory Comer, Princeton Academic Resources. Tied directly to the CyberStudy sections in the text, this Student Tool Kit offers 57 intriguing Video Cases running three to seven minutes each. The Video Cases focus on persons affected by disorders discussed in the text. Students first view the video and then answer a series of thought-provoking questions. Additionally, the Student Tool Kit contains multiple-choice practice test questions with built-in instructional feedback for every option.

PowerPoint Slides

Available at the Instructor's site on the companion Web site are comprehensive PowerPoint slide presentations and supplemental student handouts for Chapter 17. The slide files reflect the main points of the chapter in significant detail. Student handouts were created using the instructor slides as a base, with key points replaced as "fill-in" items. Answer keys and suggestions for use also are provided.

DSM-IV-TR Masters

B-60, DSM-IV-TR Diagnostic Criteria for Separation Anxiety Disorder
 B-61, DSM-IV-TR Diagnostic Criteria for Oppositional Defiant Disorder
 B-62–B-63, DSM-IV-TR Diagnostic Criteria for Conduct Disorder
 B-64–B-65, DSM-IV-TR Diagnostic Criteria for Attention-Deficit/Hyperactivity Disorder
 B-66, DSM-IV-TR Diagnostic Criteria for Enuresis

B-66, DSM-IV-TR Diagnostic Criteria for Encopresis
 B-67, DSM-IV-TR Diagnostic Criteria for Autistic Disorder
 B-68, DSM-IV-TR Diagnostic Criteria for Asperger's Disorder
 B-69, DSM-IV-TR Diagnostic Criteria for Mental Retardation
 B-70, DSM-IV-TR Diagnostic Criteria for Mathematics Disorder
 B-70, DSM-IV-TR Diagnostic Criteria for Disorder of Written Expression
 B-70, DSM-IV-TR Diagnostic Criteria for Reading Disorder
 B-71, DSM-IV-TR Diagnostic Criteria for Phonological Disorder
 B-71, DSM-IV-TR Diagnostic Criteria for Expressive Language Disorder
 B-72, DSM-IV-TR Diagnostic Criteria for Mixed Receptive/Expressive Language Disorder
 B-73, DSM-IV-TR Diagnostic Criteria for Stuttering

Internet Sites

Please see Appendix A for full and comprehensive references.

Sites relevant to Chapter 17 material are:

<http://www.thearc.org>

This site includes information on the Arc, an organization of and for people with intellectual and developmental disabilities, chapter locations, and links to additional resources.

<http://www.conductdisorders.com/>

This site is maintained by a "group of parents raising challenging children."

<http://members.tripod.com/~tourette13/>

This site discusses how Tourette's syndrome (TS) is a neurological disorder characterized by tics or involuntary, rapid, sudden movements or vocalizations that occur repeatedly in the same way.

<http://www.nimh.nih.gov/health/publications>

This Web site, provided by the National Institute of Mental Health, supplies downloadable links to PDF files and booklets on a variety of mental health topics.

<http://www.chadd.org>

Run by children and adults with ADHD, this site offers support for individuals, parents, teaches, professionals, and others.

Mainstream Films

Films relevant to Chapter 17 material are listed and summarized below.

Key to Film Listings:

P = psychopathology focus

T = treatment focus

E = ethical issues raised

Please note that some of the films suggested may have graphic sexual or violent content due to the nature of certain subject matters.

The Breakfast Club

From 1985, this John Hughes classic follows five high school students from different social groups spending a Saturday together in detention. **P, comedy/serious film**

Charly

From the award-winning book *Flowers for Algernon*, this 1968 film portrays Charly, an adult suffering from mental retardation. The film details Charly's experiences with doctors attempting to "cure" him, leading up to his participation in an experimental treatment that raises his IQ to genius levels but not his emotional maturity. Issues of informed consent and the responsibilities that accompany science are handled well. **P, T, E, serious film**

Crazy/Beautiful

This 2001 film stars Kirsten Dunst as a troubled, rebellious rich girl who abuses drugs and alcohol and is medicated for depression. Her romance with a boy from the wrong side of the tracks helps her put her life back together. **P, serious film**

Dead Poet's Society

This 1989 film stars Robin Williams as an unconventional teacher in a strict prep school. The suicide of one of his students is explored. **P, E, serious film**

Dominick and Eugene

From 1988, this touching film follows fraternal twins—one (Ray Liotta) is an ambitious medical student, the other (Tom Hulce) is a "slow" trash collector. **P, serious film**

Equus

In this 1977 film, psychiatrist Richard Burton treats a young boy (Peter Firth) who has blinded horses, seemingly for no reason. **P, T, E serious film**

I Am Sam

From 2001, this Sean Penn film follows Sam Dawson, a father with the mental capacity of a 7-year-old. **P, E, serious/commercial film**

Mad Love

This 1995 stars Chris O'Donnell as a teen "saving" Drew Barrymore after her family puts her in a psychiatric hospital. **P, serious film**

The Other Sister

From 1999, this film stars Juliette Lewis as a young woman with mental retardation striving for independence from her (overly) protective mother (Diane Keaton). **P, commercial/serious film**

Pretty in Pink

This 1986 story of teen angst stars Molly Ringwald as a quirky girl from the bad side of town and Andrew McCarthy as her rich kid crush. **P, commercial comedy/serious film**

Prince of Tides

In this 1991 film, an adaptation of a Pat Conroy novel, Nick Nolte plays a football coach who is estranged from his wife and who enters into an affair with the psychiatrist (Barbra Streisand) of his suicidal sister. **P, T, E, serious/commercial film**

Rain Man

This 1988 film stars Dustin Hoffman as a man with autism and savant syndrome who is forced to travel cross-country with his self-centered, greedy younger brother (Tom Cruise). **P, T, serious film**

Thirteen

This disturbing film from 2003 follows two girls on the edge of adolescence and identity development. **P, serious film**

What's Eating Gilbert Grape

This 1994 film stars Johnny Depp as Gilbert, the eldest brother in a family with a very large mother (Darlene Cates) who hasn't left the house since her husband committed suicide years before. Leonardo DiCaprio plays Arnie, Gilbert's teenage brother who suffers from mental retardation and needs constant supervision. **P, serious film**

William Shakespeare's Romeo + Juliet

This 1996 Baz Luhrmann adaptation of the Shakespeare classic stars Leonardo DiCaprio and Claire Danes as star-crossed, teen-aged lovers whose ill-fated relationship ultimately ends in both their deaths. **P, serious film**

Other Films:

Igby Goes Down (2002) problems of childhood and adolescence. **P, serious film**

Silent Fall (1994) autism. **P, commercial/serious film**

Spellbound (1945) **P, T, E, commercial thriller/romance**

Comer Video Segments

Available as a supplement, this revised set of videotapes contains short clips depicting various topics related to abnormal psychology. Please see the accompanying Video Guide for specific clips linked to Chapter 17.

Recommendations for Purchase or Rental

The Comer Video Segments include excerpts from many superb clinical documentaries. While the segments alone are ideal for use in lectures, it often is useful to assign the entire documentary for special class screenings or library use by students. The following videos and other media are available for purchase or rental and appropriate for use in class or for assignment outside of class.

Behavioral Treatment of Autistic Children

Focus International
1160 E. Jericho Turnpike
Huntington, NY 11743
(516) 549-5320

Hills and Valleys: Teen Depression

Films for the Humanities and Sciences
P.O. Box 2053
Princeton, NJ 08543-2053
Phone: 800-257-5126

Fax: 609-275-3767

Email To: custserv@films.com

Autism

Films for the Humanities and Sciences
P.O. Box 2053
Princeton, NJ 08543-2053
Phone: 800-257-5126
Fax: 609-275-3767
Email To: custserv@films.com

ADHD—What Can We Do?

Guilford Publications, Inc.
72 Spring Street
New York, NY 10012
tel: (800) 365-7006
or (212) 431-9800
fax: (212) 966-6708
(800) 365-7006
www.guilford.com

ADHD—What Do We Know?

Guilford Publications, Inc.
72 Spring Street
New York, NY 10012
tel: (800) 365-7006
or (212) 431-9800
fax: (212) 966-6708
(800) 365-7006
www.guilford.com

Understanding the Defiant Child

Guilford Publications, Inc.
72 Spring Street
New York, NY 10012
tel: (800) 365-7006
or (212) 431-9800
fax: (212) 966-6708
(800) 365-7006
www.guilford.com

Techniques of Play Therapy: A Clinical Demonstration

Guilford Publications, Inc.
72 Spring Street
New York, NY 10012
tel: (800) 365-7006
or (212) 431-9800
fax: (212) 966-6708
(800) 365-7006
www.guilford.com

CLASS DEMONSTRATIONS AND ACTIVITIES

Case Study

Present a case study to the class.

Panel Discussion

Have students volunteer to discuss their own experiences with childhood disorders. [NOTE: A brief reminder about sensitivity and professionalism is worthwhile here.]

“It’s Debatable: Ritalin: Straightjacket or Miracle Drug?” (see Preface instructions for conducting this activity)

Using the text as a platform, have students volunteer (or assign them) in teams to opposite sides of the debate topic. Have students present their case in class following standard debate guidelines.

“It’s Debatable: Does Exposure to Television Really Lead to ADHD?” (see Preface instructions for conducting this activity)

Have students volunteer (or assign them) in teams to opposite sides of the debate topic. Have students present their cases in class following standard debate guidelines.

Ritalin

The use of stimulant medications such as Ritalin has led to one of the more effective treatments for attention-deficit/hyperactivity disorder. The drugs reduce the activity-level problems, thereby making the child more manageable at home and in the classroom. Ask your students to put themselves in the roles of parents, teachers, and children and to discuss the implications, both pro and con, of using stimulant medications to control children’s behavior.

SUGGESTED TOPICS FOR DISCUSSION

Bullying

Using Psych Watch on p. 559 in the text as a platform, lead a discussion on bullying in schools. Do students think it is a serious problem? What are their suggestions for reducing it?

Does Exposure to Television Really Lead to ADHD?

Lead a discussion on the recent findings about exposure to television and rates of ADHD.

Children’s Problems

Lead a discussion about ways to help children deal with such family adjustments as divorce, financial changes, and death. Ask for student input into the types of problems these children can be expected to encounter.

Learning Disabilities

Lead a discussion on how students feel about labeling learning disabilities (LDs) as mental illness. Learning disabled students show few, if any, signs of emotional disturbance, and some authorities question classifying

learning disabilities as psychological disorders. Inform the class that several students in your class will fit into this classification. Use an overhead projector to list the advantages and disadvantages of calling LDs mental illness.

Presume You Are a Teacher . . .

Johnny is 7 years old and in the first grade. He has trouble sitting still, often loses things, is very loud, and acts very impulsively. He is disruptive to your classroom. You are fairly certain he has ADHD. You are meeting with his parents tomorrow night during Parent-Teacher Night. As typically happens at these events, you and the child’s parents will have 10 minutes together. You want to convince them to seek an evaluation. What do you say? Do you recommend a formal evaluation by a mental health professional? Why or why not?

Presume You Are a Mental Health Professional . . .

Johnny is 7 years old and in the first grade. He has trouble sitting still, often lose things, is very loud,

and acts very impulsively. Your evaluation has determined that he meets criteria for ADHD. His parents are coming to your office tomorrow to discuss the results. How do you tell them? What if they feel that they've done something wrong? Do you recommend psychotherapy? Do you recommend medication?

Presume You Are a Therapist . . .

Lead a discussion on the ethical issues of counseling with children and adolescents. As minors, their parents have a legal right to information about their treatment. How would students—acting as therapist—deal with

confidentiality issues? What do they think a parent should have the right to know? How would they explain the various aspects of confidentiality to an elementary school child? To an adolescent?

Mainstreaming

Lead a discussion on the topic of mainstreaming mentally retarded students. What are the pros and cons of this issue? Does mainstreaming risk setting up the retarded child for social rejection? Many students will have been exposed to this practice in the K–12 schooling.

ASSIGNMENTS/EXTRA CREDIT SUGGESTIONS

“Write a Pamphlet”

With the use of a software program like Microsoft Publisher or simply paper and markers, students can create a pamphlet on one or all of the disorders of childhood and adolescence. Students should be encouraged to be as accurate and up-to-date as possible and also to present all sides of the disorder (e.g., alternate treatment approaches or theories).

Keep a Journal

In addition to helping students synthesize material, this activity is helpful in developing writing skills. Have students keep a journal of their thoughts on course material through the semester. This can be done in the first or last five minutes of class or as an out-of-class assignment. Faculty generally should have students submit their journals for review on an on-going basis, since students can have the tendency to delay writing until the end of the semester. Some suggestions for journal topics include: reactions to the case examples; strengths and weaknesses of prevailing theoretical explanations; hypothetical conversations with sufferers of specific disorders, etc.

Presume You Are an Expert . . .

Tell the students that you received a phone call from your senator last night at home. He or she recognized that you are doing a fine job instructing students on the issue of childhood abuse. Your senator wants you and several students to come to Washington, D.C., to testify before a Senate subcommittee on a new law intended to prevent the abuse of children. Ask students to pre-

pare a five-minute presentation outlining a recommendation for a law that might reduce child abuse. Remind them that their testimony will influence law. Also remind them that their testimony is “expert” and that they may be challenged about the validity of what they are saying.

Abnormal Psychology Student Tool Kit Video Questions

As a homework assignment, have students watch a video clip and answer the accompanying questions. Students can answer the questions directly into the on-line assessment feature. The results of these quizzes report to the site's built-in grade book.

Web Site Quiz

For homework or extra credit, have students complete the quiz for Chapter 17 located on the companion Web site. Students can complete an on-line test of the key chapter material (using questions NOT from the test bank) and have their scores e-mailed directly to the course instructor.

Essay Topics

For homework or extra credit, have students write an essay addressing one (or more) of the following topics:

- (1) Discuss the issue of bullying (see Psych Watch on p. 559 in the text). From your experience, is bullying really problematic? What interventions do you think should be researched and implemented to stem this (growing) problem?

- (2) Using *The Media Speaks* (p. 555 in the text) as a platform, discuss the possibility of “Internet addiction disorder” and the impact of increased Internet use on social and emotional development
- (3) Discuss the use of Ritalin as treatment for ADHD.

Research Topics

For homework or extra credit, have students write a research report addressing one (or more) of the following topics:

- (1) Conduct a “Psych Info” search and write an annotated bibliography on Ritalin as a treatment for ADHD. What types of symptoms are best treated by this medication? What studies are examining the risks? Have validity studies been conducted to examine the criteria used for diagnosis?
- (2) Research and review the literature on child abuse (see *A Closer Look* on pp. 560–561 in the text). What are the predictors of child abuse? What are the long-term problems victims have? What treatments are successful for abusers? For victims?
- (3) Research and review the literature on ADHD and race. What conclusions are being drawn?
- (4) Research and review the literature on learning, communication, and/or developmental coordination disorders (see *A Closer Look* on p. 582 in the text). What are the symptoms, treatments, and prognoses for these disorders? What interventions are being investigated?

Film Review

To earn extra credit, have students watch one (or more) of the mainstream films listed in this chapter and write a brief (3–5) page report. Students should summarize the plot of the film in sufficient detail to demonstrate familiarity, but should focus their papers on the depiction of psychological abnormality. What errors or lib-

erties did the filmmaker take? What is the message (implicit or explicit) concerning the mentally ill?

Case Study Evaluations

To complement the Comer and Gorenstein supplemental case study text, case study evaluations have been created. Students can be assigned the appropriate case study and evaluation as homework or for class discussion. While case study evaluation questions are listed in their entirety on the companion Web site at www.worthpublishers.com/comer, the relevant case studies follow.

Case Study 15: Autism

Case Study 16: Attention-Deficit/Hyperactivity Disorder

Case Study 17: Conduct Disorder

Web-Based Case Studies

Nine Web-based case studies have been created and posted on the companion Web site. These cases describe the individual’s history and symptoms and are accompanied by a series of guided questions which point to the precise DSM-IV-TR criteria for each disorder. Students can both identify the disorder and suggest a course of treatment. Students can be assigned the appropriate case study and questions as homework or for class discussion. The case relevant to Chapter 17 is referenced below.

The Case of Eric: Disorders of Childhood

Crossword Puzzles

As a homework assignment or for extra credit, have students complete and submit Crossword Puzzle #17.

Word Searches

As a homework assignment or for extra credit, have students complete and submit Word Search #17.