Recognition of clinical child psychology as a unique discipline has only emerged in the past 30 years, despite auspicious beginnings. The end of the 19th century ushered in an era of social reform that addressed the need to protect children’s rights concerning health and education, to provide protection within the judicial system, and to free children from working within the adult workforce (Culbertson, 1991). In the wake of this movement, child labor laws and mandatory education became a reality. At the turn of the century, Lightner Witmer established the first psychology clinic to treat children with learning disabilities, and by 1909 more than 450 cases had been seen at the clinic. However, Witmer fell out of favor with colleagues, due to his refusal to adopt Terman’s revision of the Stanford-Binet tests of intelligence and his reluctance to accept Freud’s theories on behavior disorders.

William Healey, an English-born psychiatrist who shared America’s enthusiasm for Freud’s theories, opened the first child guidance clinic in Chicago in 1909. By 1933, 42 child guidance clinics were in operation in a wide variety of locations, including juvenile institutions, courts, hospitals, schools, and universities. As the popularity of the child guidance clinics grew, the emphasis shifted from delinquency to problems evident at home and at school, with a primary interest in parent-child difficulties.

The underlying philosophy of the time was that the source of children’s problems could be found in parenting and the family (Horn, 1989, p. 27). In 1948, 54 child guidance clinics came together to form the American Association of Psychiatric Clinics for Children (AAPCC). According to Horn this marked a shift from identification to training and treatment, a movement riddled with debate over standards, roles, and status among psychiatrists, psychologists, and social workers. For a summary of the time lines in historical perspective, refer to Rapid Reference 1.1.

Despite the popular rise of the child guidance clinics, the field of clinical child
Early Milestones in the History of Child Psychology

1892 American Psychological Association founded. G. Stanley Hall is first president.
1896 L. Witmer founds first psychology clinic, University of Pennsylvania, for children with learning disabilities and academic problems.
1897 Witmer’s clinic offers 4-week summer course in child psychology.
1905 Binet-Simon Intelligence Scale for measuring mental abilities in children published in France.
1907 Witmer establishes a residential school for retarded children and founds the first clinical journal, The Psychological Clinic.
1908 H. Goddard establishes first clinical internship program at Vineland Training School (New Jersey).
1909 Beers, supported by psychologist W. James, and psychiatrist A. Meyer founds the National Committee for Mental Hygiene, later renamed National Association of Mental Health (NAMH).
1909 W. Healey establishes the first child guidance center, the Juvenile Psychopathic Institute (Chicago), to treat and prevent mental illness in juvenile offenders. Later named the Institute for Juvenile Research.
1909 G. Stanley Hall invites Sigmund Freud to lecture on psychoanalysis at Clark University.
1910 Goddard translates the Binet-Simon Intelligence Test for use with “feeble-minded children” at the Vineland School.
1911 A. Gesell appointed director of Yale’s Psychoeducational Clinic, renamed Clinic of Child Development.
1912 J. B. Watson publishes Psychology as a Behaviorist Views It.
1916 Terman’s Stanford-Binet Intelligence Test is published.
1917 APA section of clinical psychology is founded.
1920 Watson and Raynor demonstrate that fear can be conditioned in a child called Albert.
1922 NAMH funds eight pilot child guidance clinics established in various cities.
1926 Piaget publishes The Language and Thought of the Child.
1928 Anna Freud publishes Introduction to the Technique of Child Analysis.
1930 Kanner joins Johns Hopkins University and opens first pediatric-psychiatric clinic, Harriet Lane Pediatric Clinic.
1932 M. Klein authors The Psychoanalysis of Children.
1935 Kanner publishes first textbook on child psychiatry.
1937 Adolescent psychiatric ward opens at Bellevue Hospital.
1944 Kanner describes autistic behaviors and attributes illness to “refrigerator mother.”
psychology encountered many roadblocks that delayed the establishment of child psychopathology as a unique discipline until 30 years ago. One reason for the delay was the fact that theories of child development were firmly entrenched in the nature/nurture controversy.

Toward the end of the 19th century there was a growing belief that mental illness had a biological basis, and Emil Kraepelin’s (1856–1926) textbook published in 1883 argued that physical ailments could cause mental dysfunction. The disease model was a mixed blessing, with some intent on finding a cure while

1945 Studies by R. Spitz raise concerns about negative impact of institutional life on children.
1948 American Association of Psychiatric Clinics for Children (AAPCC) is formed as 54 child guidance clinics come together.
1950’s Behavior therapy emerges as a treatment alternative for child and family problems.
1951 Bowlby publishes on attachment.
1952 American Psychiatric Association (APA) publishes the Diagnostic and Statistical Manual of Mental Disorders (DSM-I). The DSM contains two disorders of childhood: Adjustment Reaction and Childhood Schizophrenia.
1953 The American Academy of Child Psychiatry is established.
1968 DSM-II published and adds “hyperkinetic reaction of childhood.”
1977 Thomas and Chess publish work on the nine categories of temperament.
1980 DSM-III is first version of DSM to make specific developmental recommendations regarding childhood disorders.
1984 Sroufe and Rutter introduce domain of child psychopathology as offshoot of developmental psychology; Developmental Psychopathology Journal is introduced.


CAUTION

The nature (heredity) and nurture (environment) debate has waged for centuries. John Locke, the 17th-century English philosopher, proposed that children came into the world as a blank slate (tabula rasa) and it was the parents’ responsibility to fill the slate with the proper environmental controls and discipline. By contrast, the 18th-century French philosopher Jean-Jacques Rousseau envisioned the child as a flower that would grow and flourish, naturally, in a laissez-faire approach. Caring, nurturing, and opportunity were the parents’ gifts to the growing child. Most psychologists today appreciate the interaction of heredity and environment.
Henry Goddard is credited with establishing one of the largest training schools for the mentally retarded. However, the belief system upon which it was constructed did much to harm attitudes about the mentally retarded. Goddard’s beliefs were summarized in his fictional book that chronicled two sets of offspring of Martin Kallikak: descendants from his union with a barmaid, who were plagued by feeblemindedness, delinquency, and alcoholism, and descendants of his union with a “nice girl,” who all became respectable citizens.

Abnormal behavior in children continued to be interpreted from the vantage point of adults, and thus childhood maladjustment was described in adult terms and treated with adult treatment methods (Peterson & Roberts, 1991). By the mid-1930s, child guidance clinics were firmly entrenched in linking child problems to adult problems. After years of viewing children’s problems from the vantage point of adult psychopathology, the current trends are to refine our understanding of how many characteristic features of these child and adolescent disorders differ from adult disorders. Since the 1970s, several journals have emerged that are exclusively devoted to research about child and adolescent clinical concerns (Journal of Clinical Child Psychology, Journal of Abnormal Child Psychology, Journal of the American Academy of Child and Adolescent Psychiatry, Journal of Child Psychology and Psychiatry and Allied Disciplines, etc.).

In the mid-1980s, the field of clinical child psychology witnessed the evolution of yet another stage of development. At this time, the domain of developmental psychopathology (Sroufe & Rutter, 1984) emerged as an offshoot of developmental psychology, complete with its own journal, Development and Psychopathology. Within this framework, atypical behavior is conceptualized as deviating from the normal developmental pathway.

Organizational principles of developmental psychopathology define a system that considers human development as holistic (the interactive and dynamic concept of the total child) and hierarchical (movement toward increasing complexity;
Cicchetti & Toth, 1998). Increased emphasis has been placed on determining processes that can inhibit (protective factors) or escalate (risks) the development of maladaptive behaviors.

PRACTICAL APPLICATIONS: CASE STUDY ILLUSTRATIONS OF CHILD PSYCHOPATHOLOGY

The following cases will serve as an introduction to some of the practical issues faced by child clinicians and provide a framework for better understanding the importance of considering developmental contexts and environmental influences in understanding child psychopathology.

The Cases of Jason, Winnie, and Brian

The psychologist is asked to observe three children in Mrs. Skill’s grade 4 classroom: Jason, Winnie, and Brian. All three children have been rated as demonstrating the following behaviors: has problems sustaining attention, loses things necessary for tasks, is easily distracted, is forgetful, is restless, doesn’t seem to listen, is disorganized, doesn’t complete assignments, and demonstrates poor follow-through. The psychologist's observations of the children verify information obtained from the teacher rating scales. A review of the children's cumulative folders reveals that all three children scored within the average range on the Otis-Lennon group intellectual screening test given during the previous grade 3 school year.

**Question:** Is a diagnosis of Attention-Deficit/Hyperactivity Disorder (ADHD) an appropriate classification for Jason, Winnie, or Brian? Why?

According to the *Diagnostic and Statistical Manual of Mental Disorders*–fourth edition, text revision (*DSM-IV-TR*; APA, 2000), all three children demonstrate many symptoms associated with ADHD. The psychologist has verified the teacher's ratings of these behaviors through classroom observation, has reviewed the school records, and is fairly comfortable ruling out any contributing intellectual difficulties. Furthermore, these problems have been documented on an ongoing basis.
What’s missing from this picture?
In order for the psychologist to diagnose whether the three children have ADHD, or rule out the possibility of ADHD in favor of a different diagnosis (a process called differential diagnosis), information is required from several key sources, including the home and school environments. What is missing, therefore, is information from the child’s home environment. The psychologist schedules interviews with all three parents to obtain additional information.

The Case of Brian
According to Brian’s mother, Brian has “always been this way.” His mother describes Brian as a “space cadet” who constantly misplaces things and often gets distracted when trying to do his homework. Brian eats standing up and is always on the go. His mother adds that Brian is just like his father, who is also restless, active, and distracted. Brian seems very capable (his mother and teacher both feel he is a bright boy) but has problems completing assignments because of his distractibility. Everything seems to take his attention away from the task at hand.

After talking to the mother, the psychologist develops a case formulation (a hypothesis about why the problem behavior exists and how it is being maintained). The case formulation is based on information obtained from the family history, consistency in Brian’s behaviors across situational contexts (home and school), and the longevity of the problem (he has always been that way). The psychologist is now more confident in suggesting that Brian does have ADHD, probably the predominantly Inattentive Type, and discusses possible interventions with Brian’s parents.

Based on all the information, the psychologist makes a provisional diagnosis for Brian of ADHD, Predominantly Inattentive Type.

The Case of Winnie
Winnie’s mother arrives at the interview out of breath and very anxious to hear about her daughter. Her mother describes Winnie as a “real worrier” and admits that she is that way herself. Winnie has always been very timid, and as an infant she was cautious, fearful, sensitive to noises and touch, and “slow to warm up to others.” Socially, Winnie has a few close friends. Homework is a painful process, as perfectionistic tendencies get in the way of completing assignments because Winnie keeps erasing her work. Because of the extent of her fears and anxieties, Winnie is often overwhelmed by tasks and appears inattentive, distracted, and forgetful.
Winnie’s provisional diagnosis is General Anxiety Disorder. Rule out possible Obsessive-Compulsive Disorder.

**The Case of Jason**

Jason’s foster mother arrives at the interview with her social worker. This is Jason’s fourth foster placement in the past 2 years. Jason has been in his current foster placement for the past 6 months. According to the social worker, Jason was a witness to family violence from an early age. Jason’s family was well known to Social Services, and Jason has been in care several times in the past for reported neglect and possible abuse. Shortly after Jason and his brother rejoined their parents 2 years ago, Jason’s father shot his mother and then himself, while Jason and his younger brother slept in an adjoining bedroom. Jason has been receiving play therapy for the past 2 years. Jason continues to have trouble sleeping and is often agitated and restless. In relationships, his behavior vacillates between being overly inhibited (shy and withdrawn) or disinhibited (socially precocious). His ability to sustain his attention and concentration is impaired, and he is often forgetful and appears disorganized.

Jason’s provisional diagnosis is Posttraumatic Stress Disorder (chronic). Rule out possible Reactive Attachment Disorder and Attention Deficit Disorder.

**Summary of the Three Child Study Cases**

Although the three children demonstrated similar symptoms in the classroom and in the home environment (pervasive across situations), only one of the three children was likely demonstrating ADHD.

Given high rates of comorbidity (disorders occurring together) in childhood disorders and the fact that many disorders present with similar symptom clusters, the need for developing a case formulation based on information from multiple sources cannot be overemphasized.

**The Case of Matthew**

The next day, the psychologist is asked to observe another child in the fourth grade: Matthew, an 11-year-old who is repeating the grade 4 program. Matthew has a behavior problem, and his emotions often escalate out of control. This day is no exception. When the psychologist observes Matthew in the classroom, he demonstrates a full-blown temper tantrum, throwing himself on the floor, kicking, and crying.
The psychologist makes an appointment to meet with Matthew’s father. She leaves the elementary school and stops on her way home to pick up her 3-year-old daughter, Rachel, at the day care center. To the psychologist’s dismay, Rachel is lying on the floor, kicking and screaming because another child took her favorite toy from her.

When the psychologist meets with Matthew’s father, he states that Matthew’s behavior problems have been ongoing from an early age. Matthew can be aggressive, moody, and irritable. Tantrums are frequent and often unpredictable. Matthew is oppositional and defiant at home and at school, and he often refuses to comply with even the smallest request. Often Matthew seems to deliberately annoy others.

**Question: Are the temper tantrums produced by Matthew and Rachel indicative of a disruptive behavior disorder?**

Disruptive behavior disorders, classified as Conduct Disorder (CD) and Oppositional Defiant Disorder (ODD) by the *DSM-IV-TR* (APA, 2000), are highly prevalent in children and adolescents. Of these disorders, ODD is represented by a constellation of symptoms of aggression, anger, and disobedience. Children with ODD have recurrent displays of negative behaviors toward authority that are defiant, disobedient, and hostile (APA, 2000). Matthew’s provisional diagnosis is Oppositional Defiant Disorder or depression.

**The Case of Rachel**

The psychologist’s 3-year-old daughter throws tantrums at the day care center when she is frustrated. These tantrums have been increasing in frequency for the past 6 months. Talking to the day care staff, the psychologist finds out that there is one particular child, Arty, who seems to trigger these tantrums. Arty joined the day care center about 6 months ago. Rachel does not throw tantrums at home and is a relatively easy-to-manage child.

The psychologist is aware that, developmentally, tantrum behavior in toddlers normally peaks at around 3 years of age. The day care center staff members are not concerned and see Rachel’s behavior as reactive to increasing frustration. The provisional diagnosis is a developmentally appropriate response to frustration.

**DON’T FORGET**

Although Matthew and Rachel displayed the same behavioral response to frustration (temper tantrums), when viewed within a developmental context, tantrums are a normal expression of frustration at 3 years of age but more deviant behavior at 11 years.
Distinguishing Normal from Abnormal Behavior

Although many of the professional skills and competencies required to distinguish normal from abnormal behavior are shared by clinicians who serve adult and child populations, there are also several unique skills and competencies that distinguish these two populations as separate clinical fields.

Determining whether a behavior pattern is normal or abnormal requires, at a minimum, a fundamental understanding of normal expectations and the range of behaviors that constitute the broad limits of the average or normal range. In order to determine whether a behavior falls outside the normal range, clinical judgment is often based on a series of decision-making strategies. One way of measuring how the behavior compares to normal expectations is the use of “the four Ds” as a guideline to evaluating the behavior: deviance, dysfunction, distress, and danger (Comer, 2001).

Rachel, the psychologist’s 3-year-old daughter, was previously observed throwing a temper tantrum at the day care center. Consider the severity of Rachel’s tantrum behavior in relation to the tantrum behavior of another 3-year-old child, Arty.

The psychologist observes Rachel throwing a temper tantrum because Arty has taken her favorite toy. Rachel is lying on the floor, crying and kicking her legs into the floor mat. This behavior occurs whenever Arty takes this toy away (about twice a week) and lasts until the teacher intervenes. Rachel’s mother has not seen this behavior at home. Arty also causes a similar reaction from Sara, another child in the program. Arty is constantly fighting with other children. Arty takes what he wants, when he wants it. If stopped, Arty throws temper tantrums that escalate in proportion and can last up to half an hour. On two occasions, Arty has injured a teacher by throwing an object wildly into the air. When frustrated, Arty will strike out, and he has bitten others to get his way. Arty’s mother has asked for help with managing Arty’s behavior. She is afraid Arty will injure his new baby brother.

In evaluating Rachel’s and Arty’s behaviors, we know that tantrum behavior peaks at 3 years of age and that biting is not uncommon among preschoolers. However, although Rachel’s tantrum behavior would likely be considered to fall within the range of normal expectations, Arty’s behaviors are more concerning, be-

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**DON’T FORGET**

Clinical decisions are often based on measures of the intensity, duration, and frequency of a behavior relative to the norm. In addition, evaluating whether a behavior is pervasive across situations can also provide information regarding the nature and severity of the behavior in terms of eliciting mild, moderate, or severe levels of concern.
cause the behaviors demonstrate deviance from the norm on all measures: intensity (he has injured others); frequency (he has done so repeatedly), and duration (his tantrums last at least a half hour). In contrast, Rachel's behaviors are isolated to the school situation and to Arty's advances in particular. Rachel's tantrums would likely elicit a mild level of concern and possibly result in the development of a behavioral intervention plan to assist Rachel in coping with Arty's advances. However, in addition to all the aforementioned concerns, Arty's behaviors would also be considered more severe due to the pervasive nature of the behavior, which is evident at home as well as at school. Furthermore, the behaviors pose a danger to those around him (he has injured a teacher), and Arty has not developed appropriate skills in areas of self-control or social relationships (dysfunction). Arty's ease of frustration, low frustration tolerance, and habitual tantrum behavior all signal high levels of distress. In addition, Arty's behaviors are disturbing and distressing to others. Based on the nature of Arty's problem behaviors, a more intensive treatment program would be required to modify his behavior.

The use of the four Ds can provide helpful guidelines in determining normal from abnormal behavior in the following ways.

**Deviance.** Determining the degree that behaviors are deviant from the norm can be assisted through the use of informal assessment (interviews, observations, symptom rating scales) or more formal psychometric test batteries (personality assessment). Classification systems can also provide clinicians with guidelines for evaluating the degree of deviance.

Clinicians working with children and adults must also be aware that several disorders can share common features, and often additional data gathering is required to rule out or confirm the existence of a specific disorder (*differential diagnosis*). In addition to disorders sharing similar features, some disorders also occur together more frequently, a condition known as comorbidity.
Dysfunction. Once a disorder is identified, the relative impact of the disorder on the individual’s functioning must be determined. Child clinicians may be interested in the degree of dysfunction in such areas as school performance (academic functioning) or social skills.

Distress. An area closely related to dysfunction is the degree of distress the disorder causes. Children often have difficulty articulating feelings and may provide little information to assist the clinician in determining distress. Interviews with parents and teachers can provide additional sources of information. Some disorders may present little distress for the individual concerned but prove very distressing to others.

Danger. In order to determine whether a given behavior places an individual at risk, two broad areas are evaluated: risk for self-harm and risk of harm to others. Historically the focus has been on victimization and maltreatment of children (abuse or neglect) or the assessment of risk for self-harm (suicide intent). However, more recent events, such as the 1999 Columbine shootings and increased awareness of bullying, have increased concerns regarding children as perpetrators of harm. Accordingly, increased emphasis has been placed on methods of identifying potentially dangerous children and conducting effective threat assessments.

Normal and Abnormal Behaviors: Developmental Considerations

Evaluation of psychopathology from a developmental perspective requires the integration of information about child characteristics (biological and genetic) and environmental characteristics (family, peers, school, neighborhood). Therefore, understanding child psychopathology from a developmental perspective requires an understanding of the nature of cognitive, social, emotional and physical competencies, limitations, and task expectations for each stage of development. This understanding is crucial to an awareness of how developmental issues impact psychopathology and treatment. Examples of developmental tasks, competencies, and limitations are presented in Rapid Reference 1.2.

The Impact of Theoretical Perspectives

The ability to distinguish normal from abnormal behavior and select developmentally appropriate child interventions can be guided by information obtained from various theoretical frameworks. Different theoretical perspectives can provide the clinician with guidelines concerning expectations for social, emotional, cognitive, physical, and behavioral outcomes. In addition, a therapist’s theoretical
### Rapid Reference 1.2

#### Examples of Developmental Tasks, Competencies, and Limitations

<table>
<thead>
<tr>
<th>Age or Stage of Development</th>
<th>Task or Limitations</th>
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| Birth to 1 year             | Trust vs. mistrust (Erikson)  
Secure vs. insecure attachment (Bowlby)  
Differentiation between self and others  
Reciprocal socialization  
Development of object permanence (Piaget: objects exist when out of sight)  
First steps; first word |
| Toddler: 1–2.5              | Autonomy vs. shame and doubt (Erikson)  
Increased independence, self-assertion, and pride  
Beginnings of self-awareness  
Social imitation and beginnings of empathy  
Beginnings of self-control  
Delayed imitation and symbolic thought  
Language increases to 100 words  
Increase in motor skills and exploration |
| Preschool: 2.5–6           | Initiative vs. guilt (Erikson)  
Inability to decenter (Piaget: logic bound to perception; problems with appearance/reality)  
Egocentric (emotional and physical perspective; one emotion at a time)  
Increased emotion regulation (under-regulation vs. over-regulation)  
Increased need for rules and structure  
Can identify feelings: Guilt and conscience are evident  
Emergent anxieties, phobias, fears |
| School age: 6–11           | Industry vs. inferiority (Erikson)  
Sense of competence, mastery, and efficacy  
Concrete operations (Piaget: no longer limited by appearance, but limited by inability to think in the abstract)  
Can experience blends of emotions (love-hate)  
Self-concept and moral conscience  
Realistic fears (injury, failure) and irrational fears (mice, nightmares) |
assumptions will also influence how the disorder is conceptualized and guide the course of the treatment focus.

**Biomedical Theories**

Biological and physiological theories are concerned with the impact of biological and genetic factors on individual differences. There has been increasing recognition of the interactive contribution of environmental (health, nutrition, stress) and genetic influences. Emphasis has been placed on several factors in this area, including temperament, genetic transmission, and brain structure and function.

In defining abnormal behavior, a biomedical model would seek to determine which parts of the body or brain were malfunctioning, whether genetics, brain chemistry, or brain anatomy. Twin studies have been instrumental in providing information concerning the role of genetics, while refined neurological approaches, such as magnetic resonance imaging (MRI), have also contributed to our knowledge of underlying brain-based differences in some disorders.

**Psychodynamic Theories**

Freud initially envisioned abnormal behavior resulting from fixations or regressions based on earlier unresolved stages of conflict. His psychosexual stages provide potential insight into unconscious drives and conflicts that may influence the underlying dynamics of certain pathologies. The role of unconscious defense mechanisms that serve to protect the vulnerable ego stem from battles between the id (more primitive pleasure principle) and the superego (moral con-

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**DON’T FORGET**

Historically, psychoanalytic applications have been very difficult to support empirically. Influenced by Bowlby’s theories of self-development and attachment, recent research by Fonagy and Target (1996) has provided empirical support for psychodynamic developmental therapy for children (PDTC). Working through the medium of play, therapists assist children to develop skills in the self-regulation of impulses and enhanced awareness of others.
science). These defense mechanisms add depth to our understanding of more primitive child defenses, such as denial, or more socially constructive defenses, such as humor.

Erik Erikson (1902–1994) also supported the notion of stages; however, his psychosocial stages outline socioemotional tasks that must be mastered to allow for positive growth across the lifespan. As can be seen in Rapid Reference 1.2, theorists have adapted the concept of developmental tasks and stages of development to explain and predict a wide variety of behaviors based on competencies and limitations (social, emotional, cognitive, and physical) evident at each of the stages.

According to Erikson, in the first year of life, the major task is to develop a sense of basic trust versus mistrust. From the foundation of a secure attachment, the preschooler is free to explore the environment. Either a growing sense of autonomy develops or the insecure child may shrink from these experiences, producing feelings of shame and self-doubt. The school-age child masters school-related subjects and peer socialization, which increase a sense of industry versus inferiority. In adolescence, the task becomes one of identity versus role confusion.

**Behavioral Theories**

Behavioral theory is based on the fundamental credo that behavior is shaped by associations (contingencies) resulting from positive (reinforcement) and negative (punishment) consequences. Consequences are positive if

- They add a benefit (positive reinforcement; e.g., finish your work in class and you will be given ten minutes of free activity time), or
- They remove or avoid (escape) a negative consequence (negative reinforcement; e.g., if you finish your work in class, you will not have to stay after school).

Consequences are negative if

- They add an adverse or negative consequence (punishment), or
- They remove or avoid a positive consequence (penalty).

Some punishments can be so severe that behavior is eliminated altogether, a condition known as extinction.

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**DON’T FORGET**

The concept of negative reinforcement is more difficult to understand than positive reinforcement because negative reinforcement is often confused with punishment. Remember that punishments deliver negative consequences and serve to reduce rather than increase behaviors.
tion. If behavior is no longer reinforced and continually punished, extinction is often the result. Determining whether the behavior is an excess or deficit also requires knowledge of what to expect based on developmental level. Optimally, a behavioral plan will target increasing a deficit behavior rather than reducing an excessive behavior. For example, it is preferable and often more successful to attempt to increase on-task behavior than to attempt to reduce off-task behavior, since increasing the positive behavior will ultimately reduce negative consequences.

Although the majority of learned behavior occurs through operant conditioning or observational learning, behaviorists use the paradigm of classical conditioning to explain the development of irrational fears or phobias. For example, a child may develop a fear of sleeping alone if awakened by a very loud thunderstorm. Furthermore, the fear might generalize to fear of the dark, fear of loud noises, or fear of his or her own bed or bedroom. Pairing the loud noise with sleeping alone can result in the child’s developing a conditioned response of fear of his or her own bed.

**Cognitive Theories**

Cognitive theorists are primarily interested in the relationship between thoughts and behaviors and how faulty assumptions can impact on social relationships as well as influencing self-attribute in a negative way. Jean Piaget’s stages of cognitive development are outlined in Rapid Reference 1.2. Piaget was highly influential in his attempts to chart the course of cognitive development. According to Piaget, children in the preoperational stage (ages 2 to 7) can be easily mislead by dominant visual features due to their inability to consider two aspects simultaneously, what Piaget calls an inability to decenter. A very young child will say that there is more liquid in a tall thin glass than a short fat one, even though the child witnessed the same amount of liquid being poured into the two glasses. Visual
dominance also contributes to difficulties separating appearance and reality (a dog wearing a cat mask is now a cat). Taking another's perspective or point of view is also very limited due to the child's egocentrism or self-focus. The school-aged child (the concrete operations stage) is capable of reasoning beyond that of the preschool child; however, this stage is limited by concrete observations. According to Piaget, abstract thinking is not achieved until adolescence, when hypothetical and deductive reasoning emerges. Although Piaget believed that all children progress through a series of fixed stages, recent research has recognized that children of differing abilities may progress at different rates and that Piaget's stage theories may not be universal.

Social cognitive theories. Albert Bandura's (1977, 1986) contributions to the field of social cognition stem from his early work on social learning processes, observational learning, and aggression. Bandura's (1977) understanding of the social aspects of learning has been instrumental in increasing our awareness of observational learning. Children's observation and subsequent modeling of adult behavior can have positive (nurturing and empathic caring behaviors) or negative consequences (aggressive responses; e.g., witness to domestic violence).

Research concerning children’s understanding of social relationships has also been applied to the development of social skills and problem solving in social situations. Studies in this area have revealed that children rejected by peers are often aggressive, argumentative, and retaliatory towards others (Dodge, Bates, & Pettit, 1990). Furthermore, negative behaviors often resulted from tendencies to misinterpret ambivalent social situations as hostile, or what has come to be known as the hostile attribution bias.

Cognitive behavioral theories. The cognitive behavioral approach seeks to
understand associations between thoughts and behaviors. Therefore, emphasis is placed on understanding how the child’s faulty belief system contributes to maladaptive behaviors, such as aggression, depression, and anxiety. Cognitive theorists, such as Aaron Beck (1976), posit that depression develops and is sustained by self-attributions arising from a cognitive triad producing thoughts of helplessness, hopelessness, and worthlessness. Seligman and Peterson (1986) suggest that learned helplessness can develop from repeated negative self-attributions, which produce feelings of powerlessness and lack of control that ultimately become a self-fulfilling prophecy.

**Theories of Attachment and Parenting**

John Bowlby’s (1908–1990) adaptation theory was influenced by Darwin’s theory of evolution and Freud’s emphasis on internal working models. Bowlby believed that early attachment relationships carry a profound influence throughout the lifespan. Later, Mary Ainsworth explored attachment issues using the strange situation experiments and revealed that securely attached infants were more independent and better problem solvers than insecurely attached infants. Infants who demonstrated avoidant attachment rarely showed distress when separated from caregivers, while infants who demonstrated resistant attachment often demonstrated clingy behaviors and greater upset at separations from caregivers who responded with unpredictable behavioral extremes (love and anger). In the late 1970s, working with a population of maltreated infants, Main and Weston (1981) ultimately added a fourth category of disorganized behavior to describe distressful and frightened responses to caregivers.

Baumrind (1991) also investigated parenting styles and found three approaches to parenting that impacted on child behaviors for better or worse. Children raised by authoritarian parents (high on structure, low on warmth) tend to react with behaviors that are aggressive and uncooperative, tend to be fearful of punishment, and are generally weak on initiative, self-esteem, and peer competence. Children who are raised in permissive households (high on warmth, low on structure) often fail to develop a sense of responsibility and self-control. Authoritative par-
ents (high on warmth and high on structure) provide the optimum conditions for growth, and as a result children often demonstrate high degrees of self-reliance, self-esteem, and self-controlled behaviors.

**Family Systems Theory**

Family systems theory is represented by a variety of approaches that emphasize the family unit as the focus of assessment and intervention. This theoretical framework acknowledges the family system itself, as a unit made up of many subsystems: parent and child, marriage partners, siblings, extended family, and so on. Within families, behaviors are often directed toward maintaining or changing boundaries, alignment, and power. Boundaries are the imaginary lines that serve to define the various subsystems. Often a family’s degree of dysfunction can be defined by boundaries that are poorly or inconsistently defined or those that are too extreme (too loose or too rigid). Salvador Minuchin (1985), a proponent of structural family therapy, has suggested that enmeshed families (lacking in boundaries) may interpret a child’s need to individuate as a threat to the family unit.

**DON’T FORGET**

A theorist from a family systems perspective might view the aggressive behaviors of a child in the context of behaviors motivated to undermine the importance of the primary marital relationship. Triangular relationships that serve to shift the balance of power include the parent-child coalition (parent and child versus parent), triangulation (child caught between two parents), and detouring (maintaining the child as focus of the problem to avoid acknowledging marital problems).

**DON’T FORGET**

An understanding of developmental pathways includes an awareness that there are several possible pathways that may produce the same outcome, an occurrence known as equifinality (e.g., many factors may cause a single outcome, such as childhood depression), and that similar risks may produce different outcomes, which is known as multifinality (e.g., childhood neglect may result in aggressive behavior in one child and withdrawal in another; Cicchetti & Rogosch, 1996).

**Influences and Developmental Change**

Most clinicians today recognize that in addition to understanding child characteristics (temperament, developmental stage) it is equally important to consider environmental influences (family, peers, school, community, economics and culture) when evaluating child and adolescent disorders. Ultimately, the importance of including the developmental context in understanding child and adolescent
disorders is crucial to comprehending not only the child’s present level of distress or dysfunction but also how the difficulties came to be (developmental pathway).

The child clinician must also consider the impact of environmental influences as predisposing, precipitating, and maintaining (reinforcing) factors regarding the behavior in question. While theoretical assumptions can guide our understanding of the nature of developmental change, our knowledge of individual differences (stage of development, personality or temperament) can refine our understanding of a child’s unique nature. Ultimately, our awareness and understanding of how these forces are embedded in the child’s environmental context provide the key to fully comprehending child psychopathology.

According to Bronfenbrenner (1979, 1989), developmental contexts consist of a series of concentric circles emanating from the child, who occupies the innermost circle. At the core are the child’s individual characteristics (biological context, such as genetic makeup, temperament, intelligence). Moving outward, the child’s immediate environment (family, school, peers, community, neighborhood), the surrounding social and economic context (poverty, divorce, family stress), and the cultural context provide additional ripples and sources of influence. Within this framework, understanding a child’s mental disorder requires an understanding of the influences of all contextual variables.

Understanding multiple levels of influence also requires emphasizing the dual nature of influence, since child and parent mutually influence each other. Therefore, the bidirectional nature of these influences, or reciprocal determinism (Bandura, 1985), becomes a crucial aspect of interpreting how interactive effects of these influences may be instrumental in constructing different developmental pathways.

Sameroff’s transactional model (Sameroff & Chandler, 1975) captures the ongoing and interactive nature of developmental change between the child and the environment. A transactional model is also crucial to understanding the dynamics of various disorders in order to trace the developmental pathway and construct meaningful case formulations and relevant treatment alternatives. For example, in their discussion of depressive disorders in children and adolescents, Cicchetti and Toth (1998) stress the need to use an ecological transactional model in order to comprehend the complex...
nature of depressive disorders in children and youth and understand the diverse and multiple influences that contribute to the emergence of the disorder.

Theories in Context
Viewing the child within the contexts of developmental influences provides an enhanced level of insight into the underlying dynamics of potentially disordered behaviors and can guide and improve our ability to make case formulations that have ecological validity.

DON'T FORGET
Several theories have been developed to assist our understanding of the complex dynamics that exist between individual and environmental influences. Bandura developed the concepts of triadic reciprocity (1977) and reciprocal determinism (1985) to emphasize the bidirectional nature of the influence. Bronfenbrenner (1979, 1989) envisioned ecological influences from the inner child to the outer world (family, community, culture). Sameroff’s transactional model (Sameroff & Chandler, 1975) focuses on how interactive forces can shape the course of developmental change, while Cicchetti and Toth (1998) have applied the model to explain potential pathways for the development of depressive disorders in children and adolescence.

TEST YOURSELF
1. The establishment of child psychology as a unique discipline
   (a) occurred early in the 1900s.
   (b) was ushered in by the reform movement.
   (c) met with many road blocks.
   (d) was assisted by the intelligence testing movement.
2. Which of the following is not considered one of the four Ds of clinical decision making?
   (a) Dysfunction
   (b) Distress
   (c) Danger
   (d) Denial
3. According to Erikson, the first psychosocial task sets the stage for development of
   (a) autonomy versus shame.
   (b) trust versus mistrust.
   (c) industry versus inferiority.
   (d) identity versus role confusion.

4. The existence of several possible pathways that may produce the same outcome (e.g., many factors may be responsible for depression) is an example of
   (a) multifinality.
   (b) equifinality.
   (c) triadic finality.
   (d) triadic reciprocity.

5. According to Bronfenbrenner, the outermost circle of influence is represented by
   (a) culture.
   (b) school and family.
   (c) the child.
   (d) economics.

6. Negative reinforcement is the same as
   (a) punishment.
   (b) a negative consequence.
   (c) a penalty.
   (d) escape.

7. According to Piaget, preschool children’s reasoning is faulty because
   (a) they have limited memories.
   (b) they can only consider one visual feature at a time.
   (c) vision acuity is not clearly established.
   (d) they have limited attention spans.

Answers: 1. c; 2. d; 3. b; 4. b; 5. a; 6. d; 7. b