1 Introduction
Understanding the Complexities of Child and Adolescent Psychopathology

A fundamental challenge inherent in the study of child and adolescent psychopathology is distinguishing normal from atypical behavior. There are several reasons why this decision-making process is so complex and why the task is so difficult.

Determining “normal” from “abnormal” behavior requires an evaluation of the frequency of the behavior (e.g., does the behavior occur on a daily, hourly basis?), the duration (is this a recent or ongoing problem), and whether the behavior is pervasive across all situations (or situation specific). With these factors in mind, we can now begin to probe whether the behavior is atypical within a developmental context. Ten of the most important questions that will need to be addressed are the following:

1. Is the behavior atypical, given the child’s developmental stage? An understanding of normal developmental milestones provides the foundation for decisions regarding whether a behavior is atypical. For example, Grace is concerned because her 2-year-old is aggressive. Yesterday, he shoved another child off the swing because he wanted the swing. We know that aggression typically peaks around 2 years of age and then progressively declines, as children develop increased skills in self-control and emotion management. Furthermore, instrumental aggression (pushing the child to obtain an object, e.g., the swing) is a typical form of early aggression, which is less serious than hostile aggression, which is an intent to injure someone. As a result, we would be able to tell Grace with some measure of confidence that the aggressive behavior is not atypical and will likely decline from this point onward.

2. Is the behavior typical at one stage and not at another? Some behaviors are more typical or atypical at various developmental stages. For example, toddlers often engage in oppositional behaviors (the “terrible twos”) as they flex their newfound sense of independence. However, when introduced to the cases of Jeremy Jones who is 6 years old (Chapter 1; Case 2) and Scott Michaels who is 9 years old (Chapter 3; Case 11), we see “oppositional behavior” that is atypical for both of these boys, given their ages. Both boys are defiant and refuse to comply with the most reasonable of requests. Unchecked, these behaviors can continue to escalate in severity, perhaps even developing into conduct disorder (CD), a more serious variant of the disruptive behavior disorders, which we see in the case of Jason Coleman (Chapter 7; Case 24).
3. Is it possible for the same disorders to have different symptom presentations at different developmental stages? Matthew Morgan (Chapter 5; Case 18) and Jenny Sloan (Chapter 5; Case 19) are case studies of bipolar disorder (BPD); however, while Matthew potentially has child-onset BPD, Jenny has adolescent-onset BPD. Matthew’s symptoms evidence high levels of aggression and rapid mood swings, typical of child-onset BPD, while Jenny’s symptoms are closer to the adult version of the disorder, manifested in pressured speech, grandiosity, the need for little sleep, and eventually crashing into a depression and suicide attempt.

4. Do symptoms of disorders appear the same in children and adults? Many times, symptom presentations in children are different from adult versions of the disorders. The question is an important one because on the surface, the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association [APA], 2013) actually lists even fewer disorders that specifically refer to children (disorders with onset in infancy, childhood, and adolescence) than the previous version of the DSM (DSM-IV, TR; APA, 2000). This continues to be an area of concern, since symptoms for the majority of disorders (including anxiety and depression) have historically been based on field trials with adults. The DSM has attempted to address this concern by adding increased descriptions of child and adolescent criteria to the disorders, as well as associated developmental features. For example, the “depressed/sad” features of adult depression may appear as “irritable mood” in a child. Child and adolescent symptoms for posttraumatic stress disorder (PTSD) differ from adults and across different developmental levels. While younger children like Ericka White (Chapter 7; Case 26) will often reenact traumatic experiences through repetitive play, adolescents like Jason Coleman (Chapter 7; Case 25) and Juan Hernandez (Chapter 7; Case 24) may respond by engaging in high-risk behaviors (e.g., theft, fast driving, moving in with a girlfriend and leaving home, etc.). In preschool children, these symptoms can reveal even more deviations from how symptoms present in older children and adults, as was evident in Ericka’s clinical history. Compared to adults, children experience far higher rates of comorbidity (more than one disorder occurring at the same time). As a result, it is important to recognize that there are different patterns of comorbidity and that some disorders have a greater tendency to occur together than others, such as anxiety and depression (Chapter 4; Case 14, and Chapter 5; Case 17). The next three questions (5, 6, and 7) address issues of comorbidity.

5. What are internalizing behaviors, and do they have a tendency to be comorbid? Internalizing behaviors, or overcontrolled behaviors, refer to syndromes that signify “problems within the self, such as anxiety, depression, and somatic complaints that are without known medical cause and result in withdrawal
from social contact” (Achenbach & Rescorla, 2001, p. 93). Comorbidity among internalizing disorders is frequent, since they share many common symptoms. Prior to adolescence, anxiety and depression may often appear somewhat undifferentiated as negative affectivity (Achenbach & Rescorla, 2001; Kronenberger & Meyer, 2001). Shirley Yong (Chapter 4) and Maria Silva (Chapter 5) are cases that demonstrate what researchers (Clark & Watson, 1991; Ollendick, Seligman, Goza, Byrd, & Singh, 2003) proposed as part of the Tripartite Model, involving negative affectivity (NA), low positive affect (PA), and physiological hyperarousal (PH). This model suggested that while the negative emotional state of NA is shared in responses of anxiety and depression, responses of PH are primarily associated with anxiety, whereas responses of low PA, such as anhedonia, tend to be associated with depression.

6. What are externalizing behaviors and are they comorbid as well? **Externalizing behaviors**, or undercontrolled behaviors, are referred to in the DSM-5 as the disruptive behavior disorders: oppositional defiant disorder (ODD) and CD. The hyperactive/impulsive and combined types of attention deficit/hyperactivity disorder (ADHD) often are comorbid with ODD and CD. Scott Michaels (Chapter 3) and Jeremy Jones (Chapter 1) are case studies that exemplify comorbid ODD and ADHD (hyperactive-impulsive type).

7. Can internalizing and externalizing disorders ever exist in the same child? Children can have a number of different disorders at the same time (e.g., specific learning disorder, ODD, and ADHD). Having a multitude of comorbid disorders can result in symptoms of depression, due to the cumulative effect of these disorders on adjustment. The case of Jason Coleman (Chapter 7) provides an illustration of how many of the internalizing and externalizing disorders can occur together in the same child.

Developmental trajectories are the outcome of interactions between child characteristics (intelligence, social competence, heritability, temperament, etc.) and environmental characteristics (family, school, teachers, peers, neighborhood, etc.). An investigation of situational or contextual variables can uncover the underlying dynamics that precipitate and maintain problem behaviors. Question 8 is related to environmental influences.

8. What are some of the influences in the environment that can contribute to problem behaviors? Problems may be more evident in one environment (home) than another (school) or pervasive across situations. The case study of Jeremy Jones (Chapter 1) reveals how a “well-meaning” mom and grandma exacerbate his behavior problems through reinforcement (at times thinking his behaviors are “cute,” and at other times giving in to his demands out of exhaustion). Jeremy is more controlled at school, due to the structure in the classroom. The case of
Colby Tyler (Chapter 2) illustrates how conflict in the home can tip the scales. Even though he is trying to keep his world together, academically and emotionally, with his parents going through a difficult divorce, Colby’s resources have been stretched to the limit. Some factors can place children at increased risk for negative outcomes, while other factors can provide a protective buffer against harm. Risks and protective factors are addressed in Question 9.

9. What are some important risk and protective factors? There has been increased effort to uncover protective factors that can contribute to resilience despite hardship. Knowledge of risk factors can alert practitioners to warning signs, while knowledge of protective factors can provide the foundation for the development of preventive measures. A number of risk and protective factors will be discussed at the end of this chapter. It is important to know that there are several possible pathways (developmental trajectories) that may produce the same outcome—equifinality—and that children who experience similar risks may have very different outcomes—multifinality (Cicchetti & Rogosch, 1996). The final question addresses these issues.

10. What are equifinality and multifinality? In the case studies to follow, you will meet Neesha Wilson (Chapter 1) and her brother Tyrone Wilson (Chapter 3): two African American siblings who have very different outcomes, despite living in the same home and being exposed to some of the same risk factors. Neesha is 10 years of age and Tyrone is 15 years. However, while Neesha’s story is one of resilience, her brother follows the path of least resistance, developing a substance use problem and joining a street gang to support his habit. Neesha and Tyrone illustrate the concept of multifinality. Although they were exposed to similar circumstances growing up, Neesha is successful despite the odds. When you read these two cases, ask yourself what factors could have contributed to the very different outcomes for these two siblings.

While adults often self-refer, children are most likely to be referred based on adult concerns. However, behaviors that may be concerning to parents (nightmares, aggression, overactivity) are often frequently reported in “normal” children. In addition, there may be wide variations in parent responsiveness to a child’s given problems, based on extraneous circumstances at the time, such as tolerance level, and stressors, such as financial difficulties or family conflict. With an understanding of the complexities inherent in child and adolescent psychopathology, we can now turn our focus to a number of theoretical perspectives that have been developed to explain how problem behaviors develop and provide direction for treatment and intervention.
Case Formulation

Kronenberger and Meyer (2001) present a framework for diagnosis, assessment, and treatment based on three essential questions that must be answered by the child clinician. The authors suggest that regardless of the presenting problem or the theoretical background of the therapist, the child clinician is usually faced with providing answers to three primary questions:

1. What are the primary characteristics of the child’s problem?
2. How does the clinician conduct an in-depth evaluation of the problem?
3. How does the clinician decide which interventions are important?

The authors suggest that each of the questions addresses a specific issue or aspect of child psychopathology. Clinicians respond to the first question when they classify a child’s problem relative to a diagnostic category or provide a provisional diagnosis or a case formulation based on the presenting symptoms and characteristics. The second question involves the in-depth evaluation. Here, the assessment process requires knowledge of appropriate interview and observational techniques, as well as broad assessment strategies (e.g., cognitive, behavioral, and emotional functioning) and syndrome-specific tests (e.g., instruments to detect anxiety, depression, etc.). These assessment instruments can assist in confirming or ruling out potential diagnoses. The final question requires knowledge of developmentally appropriate evidence-based treatment methods that can be applied to modify the problem (Kronenberger & Meyer, 2001, pp. 1–2).

Although the questions can be answered by the majority of theoretical viewpoints, Held (1996) emphasizes the need for therapists to spend more time reconsidering the nature and composition of the theoretical system that guides their decision-making process, in what she calls the three predetermined components of therapy:

1. What constitutes problems or impediments to solutions?
2. What causes those problems or impediments to occur?
3. What methods can help clients to solve their problems, overcome their impediments, and obtain their goals? (p. 37)

Weerasekera (1996) defines case formulation as a process conducted to provide a “hypothesis of how an individual comes to present with a certain disorder or circumstance at a particular point in time” (p. 5). Case formulations have been explored from a number of theoretical approaches, including psychodynamic (Eells, 1997; McWilliams, 1999; Shirk & Russell, 1996), behavioral (Cipani & Golden, 2007; Mash & Terdal, 1997), cognitive behavioral (Bruch & Bond, 1999; Esbjørn et al., 2015), and family systems perspectives (Berman, 1997). Within the realm of child psychopathology, research linking child outcomes to parenting styles (Baumrind, 1991) and attachment
patterns (Ainsworth, Blehar, Waters, & Wall, 1978) suggests that these areas could also provide rich materials for weaving into the fabric of case formulations. Case formulation can provide a framework for assessing and organizing information in a way that informs treatment planning, by going beyond symptom presentation to deriving hypotheses regarding how the behavior developed and why it is being maintained. Although the concept of case formulation has its origins in the psychodynamic approach, the approach is readily adaptable to a variety of theoretical perspectives and is gaining increased recognition across a wide variety of theoretical models regarding adult as well as child populations (Hersen & Porzelius, 2002; Shirk & Russell, 1996).

The case formulation approach is particularly well suited to clinical/developmental child concerns because the approach

1. supports an understanding of underlying processes (cognitive, behavioral, and emotional);
2. readily allows for consideration of the impact of personal and environmental factors on past and present functioning at several levels: individual, immediate, social and economic, and culture;
3. provides an opportunity to address how risks and protective factors can impede or assist treatment;
4. provides a unique opportunity to place therapeutic interventions within an ecologically valid context;
5. can accommodate behavioral (Weisz, Weiss, Han, Granger, & Morton, 1995) and cognitive behavioral training programs that have been demonstrated to reduce anxiety (Esbjørn et al., 2015; Kendall et al., 1992), depression (Stark, Swearer, Kurkowski, Sommer, & Bowen, 1996), disruptive behavior disorders (Cipani & Golden, 2007; Spaccarelli, Cotler, & Penman, 1992), and, combined with pharmacology, symptoms of ADHD (Barkley, 1997);
6. is best utilized when a therapist is not confined to a single model or approach and is best viewed as “part of a holistic approach, encompassing the biological, psychological, social, and cultural” perspectives (Sim, Gwee & Bateman, 2005, p. 291).

**Three Stages in Case Formulation: A Conceptual Model**

As a construct, case formulation seeks to address the essential questions posed by Kronenberger and Meyer (2001) and Held (1996). When a diagnosis is made, a wealth of clinical knowledge about the disorder is readily available. The case formulation is a hypothesis about potential underlying influences that precipitate (cause) and maintain the behavior, including child factors (biological, genetic, and neurobiological) and
environmental factors (family, school, peers, community). To this end, the case formulation provides a better understanding of

- Problem identification (what is the problem?)
- Precipitating and maintaining factors (why does the problem exist? why is the problem persisting?)
- Intervention (how can the problem be alleviated?)

The case formulation presents a three-stage model that provides an organizational framework for discussing diagnosis, assessment, and treatment/intervention. The three stages of the case formulation include

Stage 1: Problem identification (clarification and classification)
Stage 2: Problem interpretation/understanding (precipitating and maintaining factors)
Stage 3: Treatment formulation (intervention strategies).

**Stage 1: Problem identification:** Knowledge of normative expectations, awareness of the etiology of disorders, and familiarity with empirical research all add to our understanding of specific disorders. At this stage, a wide variety of assessment methods allows us to access information from multiple sources (parents, teachers, child). In some multiple-problem cases, there may be a need to prioritize among problem areas based on urgency and/or severity of problems. Sometimes, what was originally thought to be “the main problem” is actually secondary to a different concern. In these cases, hypotheses are reformulated.

**Stage 2: Problem interpretation/understanding:** Developmental and family history can provide important information regarding potential genetic (family pathology, biological implications) or event-based causes (family or school history, traumatic events, etc.). Knowledge of risks and protective factors can also assist in better understanding conditions that might exacerbate or moderate the problem. At this stage, theoretical assumptions can influence how the problem is conceptualized; however, the ability to integrate information from diverse theoretical perspectives can increase our understanding of the dynamics involved.

**Stage 3: Treatment formulation:** Knowledge of evidence-based treatments that best apply to the unique aspects of the case will increase opportunities for success. Monitoring and evaluating treatment effectiveness are also important in order to validate the effectiveness of the treatment or intervention (Box 1.1).
Case Formulation From Five Different Perspectives

The following section is devoted to case formulations developed from five different theoretical frameworks: biological, behavioral, cognitive (social cognitive), psychodynamic/attachment, and parenting style/family systems.

Case Formulation Based on the Biological Perspective

The biological perspective looks to genetics, physiological factors, and brain anatomy (function and biochemical activity) to assist in understanding the etiology of human behavior and possible treatment alternatives. Developmentally, rapid growth in brain development in the first 2 years of life results in pruning of less useful connections while increasing the efficiency of neural transmissions due to a process of myelination which improves conductivity. Neurotransmitters, chemicals released into the synapse between neurons, can have a profound influence on moods and behaviors, such as depressive moods that can result from low levels of serotonin or norepinephrine, or increases in anxiety resulting from malfunction of gamma-aminobutyric acid (GABA) which is not performing adequately to inhibit anxious responses. In addition, secretion of hormones into the bloodstream, such as the release of cortisol in response to stressful circumstances, can cause the hypothalamic-pituitary-adrenal system (HPA) to go on high alert by activation of the sympathetic nervous system in individuals with PTSD or those vulnerable to other anxiety-provoking situations. In addition to these responses, certain parts of the brain have also been implicated in the etiology of specific disorders, such as low levels of activity in the frontal cortex of individuals with ADHD or irregular patterns of amygdala functioning in individuals with autism spectrum disorders (Box 1.2).

The influence of genetics in placing individuals at risk for specific disorders, such as depression, anxiety, and schizophrenia, has been well documented in research, while specific types of child temperament have also been implicated in regulating individual responses to positive or negative environmental stimuli (Fox, Snidman, Haas, Degnan, & Kagan, 2015; Kagan, 1992). Temperament involves individual differences in reactivity evident in responses related to motor, affective, autonomic, and endocrine functions and self-regulation resulting from processes and behaviors that serve to moderate reactivity, such as approach, withdrawal, attention, attack, inhibition, and self-soothing (Kagan, 2003, p. 8).
Therapeutic implications: Many biologically based treatments rely on medical management to regulate chemical imbalances due to faulty neurotransmitter production. Medications for depression often seek to correct for low levels of serotonin either by blocking the reuptake of serotonin (selective serotonin reuptake inhibitor, SSRI medications) or by blocking the reuptake of serotonin and norepinephrine (serotonin-norepinephrine reuptake inhibitor, SNRI medications) (Box 1.3).

BOX 1.3 THINKING OUT LOUD

Biological correlates of isolation: Results of a neuroimaging study have found that the anterior cingulate cortex (ACC), which is activated during physical pain, is also activated in response to distress caused by social exclusion and rejection (Eisenberger, Lieberman, & Williams, 2003). The researchers suggest that these neural connections may be part of the social attachment survival system to promote the goal of social connectedness. In addition, studies of attachment patterns have implicated neural pathways in the cognitive-affective processes that generalize internal working models (IWMs) from interactions with caregivers to other social situations. White et al. (2012) suggest that in situations of social interactions or stimuli, there are differences in the activation of reward and approach-related circuitry (e.g., left frontal activity) in the brains of those with secure attachment patterns relative to those with insecure attachment patterns. White et al. (2012) theorize that “Securely attached” individuals learn to anticipate (and elicit) support from others owing to similar past experiences with caregivers. Conversely, insecurely attached children, whose parents are thought to be on average less sensitive and responsive to bids for comfort, may develop corresponding beliefs of others as less supportive during distress and themselves as, essentially unwanted” (p. 691).
Case Formulation Based on the Behavioral Perspective

According to Mash and Terdal (1997), the behavioral systems assessment (BSA) is a “functional/utilitarian approach” to the assessment of children and families that closely adhere to the broader meaning of diagnosis as “an analytic information-gathering process directed at understanding the nature of a problem, and its possible causes, treatment options and outcome” (pp. 11–12). In direct contrast to psychodynamic theories, “BSA is more often concerned with behaviors, cognitions and affects as direct samples of the domains of interest” rather than attempting to speculate about “some underlying or remote causes” (pp. 11–12; emphasis added). There has been increased focus on the use of BSA practices and strategies in the decision-making process (Cipani & Schock, 2007; La Greca & Lemanek, 1996). For example, functional behavioral assessments (FBAs) are routinely conducted in the schools (Plotts & Lasser, 2013) with the goal of developing behavioral intervention plans (BIPs) that often focus on increasing “on-task behaviors” (as in the case of children with ADHD) or increasing “compliance” (as in cases of children with ODD). It has been debated by some that FBA is a better approach to intervention planning than classification of disorders by either the dimensional or categorical systems (Cone, 1997; Haynes & O’Brien, 1990). An example of the FBA approach can be found in this chapter, in the case of Jeremy Jones, where issues of noncompliance are addressed in a program designed to increase compliance. Proponents of BSA/FBA argue that the problem-solving strategy inherent in this approach provides a flexible system of hypothesis testing that includes diagnosis, prognosis, treatment design, and treatment efficacy/evaluation (Cipani & Golden, 2007; Mash & Terdal, 1997). The continuity between conducting the BSA/FBA and developing the BIP are emphasized by proponents of the system (Mash & Terdal, 1997; Wielkiewicz, 1995). The behavioral framework consists, at its basis, of a four-stage process to identify the problem, analyze the problem, implement a plan, and evaluate the plan.

From the behavioral perspective, behavior is learned in one of three primary ways: classical conditioning, operant conditioning, or modeling (observational learning). **Classical conditioning** occurs when a normally neutral stimulus takes on a positive or negative connotation due to association with another stimulus which has the power to trigger a reflexive response. Classical conditioning is not voluntary and occurs often beyond our control. Phobias are a very good example of irrational fears that have been classically conditioned. For example, fear of flying can result from an experience of flying under turbulent conditions. In this case, the airplane is initially a neutral stimulus (NS) which evokes a neutral response (NR); e.g., I see the plane as a means of transportation. However, on one particularly turbulent flight, I am extremely fearful that the plane is going to crash, and when I finally land, I get off the plane, vowing never to fly again. Now, the plane has been changed from a neutral stimulus to one that I am afraid of. In this situation, the plane has been associated with “bad plane” because it caused me to be very “fearful.” In the moment of flight, bad plane (US: unconditioned/automatic stimulus) was linked to bad flight (UR: unconditioned/automatic response). Now the next time I look at a plane, I don’t think of it a means of transportation, as I initially did, I now think of crashing and dying. So the plane has now become a conditioned stimulus (CS) which elicits the conditioned response (CR) of fear (see Figure 1.1). In this case, it is also likely that if offered a ride in a hot-air balloon, I would also turn that down, since my fear would generalize to all airborne systems of
transportation. This conditioning paradigm is actually used to explain and decondition phobias in an exposure therapy called systematic desensitization where a fear hierarchy is developed and relaxation techniques are paired at each step in the hierarchy until the phobia is extinguished (see Figure 1.2).

**FIGURE 1.1 Classical Conditioning of Fear of Flying**

The following paradigm illustrates how a neutral stimulus (airplane) can be transformed into a conditioned stimulus:

- **Neutral stimulus (NS)** → **Neutral response (NR)**
- **Plane as means of transportation**

- **Unconditioned stimulus (US)** → **Conditioned response (CR)**
- **Turbulent flight** → **Fear/ bad plane**

**FIGURE 1.2 Example of Exposure Therapy (Systematic Desensitization) to Decondition Fear of Flying**

Steps Involved in Systematic Desensitization: (1) Develop a fear hierarchy and (2) Pair each step in the hierarchy with a relaxation technique; proceed to next step when the stimulus no longer evokes a response of fear.

1. **Develop a Fear Hierarchy:**
   - a) Picture of a plane → Look at the picture while doing deep breathing
   - b) Book with several pictures of planes
   - c) Positive film clip about people enjoying a plane ride
   - d) Drive to airport
   - e) Go into airport and watch planes take off
   - f) Purchase short flight ticket
   - g) Take a short flight

2. **Pair each step in the Fear Hierarchy with Relaxation Techniques** (*meditation, deep breathing, muscle relaxation*) until the fear is extinguished at each stage of the hierarchy.
Rather than a reflex response, operant conditioning serves to increase our tendencies to produce or inhibit behaviors based on our experiences with rewards and punishments. If I produce a behavior and it is reinforced (rewarded), then my chances of repeating that response increase, accordingly. If I produce a response and I am punished, then the chances of me repeating that response decrease, accordingly. In operant conditioning, reinforcement can occur in two ways: (1) I can be rewarded positively by the addition of some positive consequence, for example, money or candy, or (2) I can be rewarded by the removal of something negative—for instance, if I do a good job on my school work, I do not have to serve a detention after school to finish my school work (this is referred to as negative reinforcement because it involves the removal of a negative consequence). Punishment, which always serves to reduce a response, can also be applied in two ways: (1) I can apply a direct adverse consequence for bad behavior (hitting, shocking, slapping) or (2) I can be punished by the withdrawal of something I value, such as removal of privileges. Examples of reinforcement and punishment are illustrated in Figure 1.3 (Box 1.4).
Understanding how reinforcement and punishment can be effective consequences on behavioral outcomes can provide powerful tools to institute behavioral change. For example, schedules of reinforcement and objective observation techniques can be very helpful in developing BIPs that can be monitored and modified if needed (Box 1.5).

Finally, **modeling behavior** refers to learning a behavior from observing the behavior in others. Bandura’s classic experiment of the “bobo doll” is an example of this type of learning. Children who watched an adult hit a doll were more likely to imitate the same behaviors when they were placed in a room alone with the doll, demonstrating the power of observational learning.
**Therapeutic implications:** Although many practitioners use cognitive behavioral therapy (CBT; combined therapy based on both cognitive and behavioral perspectives), there are situations that are very conducive to the use of a primarily behavioral focus. For example, school psychologists will often conduct an FBA to determine the antecedents and consequences of specific behaviors (ABC’s). Case formulations derived using the FBA approach provide information concerning the precipitating and maintaining factors inherent in a given behavioral pattern with the goal of developing an appropriate BIP to reduce negative and enhance positive behaviors (Plotts & Lasser, 2013). Children who experience various anxieties, fears, and phobias can benefit from the use of exposure techniques such as systematic desensitization and exposure and response prevention based on behavioral methods that gradually expose the child to the fearful situation/object while the child executes relaxation responses (e.g., deep breathing, mediation) that counteract fearful responses.

In conducting a functional behavior assessment, Sattler (2014) emphasizes the need to determine what is maintaining the behavior (predisposes the individual to repeat the same behavior) by examining events in the environment that occur prior to the behavior (antecedent events) and those that occur as a result of the behavior (consequences). There are a wide variety of possible antecedent events, such as social acts (a student may feel rejected by others) or activities (teacher has instructed the student to read a passage out loud in front of the class) that can serve as a trigger to a given behavior (child acts out and is removed from class). The key is to identify the functions of behavior, e.g., “what works for an individual in a given context” (p. 415). Sattler (2014) provides a seven-step guideline for conducting an FBA, including the following: define the problem behavior, perform the assessment, evaluate the assessment results, develop hypotheses, formulate a behavioral intervention, implement the intervention, and evaluate the effectiveness (pp. 416–417). The crucial step in this framework is the fourth step, “formulating a hypothesis to account for the problem behavior” (p. 419). Sattler suggests an extensive 16-point plan to assist practitioners in achieving their goal, including noting the type of behavior, where the problem occurs, when the problem occurs, characteristics of the antecedent events/conditions and setting consequences, relevant student background factors, relevant environmental background factors, functions and goals (escape, attention, control, self-regulation); student’s reactions; others’ reactions; level of teacher/parent understanding of the nature of the problem behavior; student’s attitude about the learning environment; student’s attitude about his/her parents; student’s cognitive and motivational resources for coping; and student, family, school, and community strengths and resources (pp. 419–420).

**Case Formulation Based on the Cognitive Perspective**

Negative appraisals can be part of the maladaptive thought processes inherent in a bias to interpret situations and behaviors in a negative way (Beck, 1997, 2002). These negative attitudes produce errors in thinking, such as minimizing the positive and accentuating the negative, which can be automatic and reflexive. For Beck, the cognitive **triad** refers to thought processes involving feelings of helplessness, hopelessness, and
worthlessness. One potential outcome of this type of thinking bias is the development of learned helplessness, a behavior pattern based on tendencies to give up in the face of adversity (Seligman, 1975). Cognitive theorists today believe that learned helplessness is caused by a range of negative attributions that can be global or specific, blame internal or external causes, and are seen as stable or unstable (Abramson et al., 2002). Attributions that are global (“Nobody loves me”), internal (“Nobody loves me because I am worthless”), and stable (“No one will ever love me”) are the most likely combination to result in learned helplessness. Beck suggests that maladaptive and negative thought patterns often begin in childhood based on responses to negative treatment and evaluations within the context of their family. For example, research has demonstrated that compared to mothers who are not depressed, depressed mothers tend to be more inconsistent in their parenting, engage in less activity with their children, and exhibit more frustration (irritable, control, and impatience) in dealing with child problems (Malphurs, Field, Larraine, Pickens, & Pelaez-Nogueras, 1996; Box 1.6).

BOX 1.6 THINKING OUT LOUD

Beauchaine, Strassberg, Kees, and Drabick (2002) questioned whether parents using ineffective and harsh methods of discipline fail to generate alternative solutions due to (1) an availability deficit (limited repertoire) or (2) an accessibility deficit (processing deficit during times of stress). In order to enhance treatment efficacy, the authors stress the need to address both negative attributions and affect regulation in parent training programs. They suggest that negative parent attributions may undermine successful use of the skills taught.

By the end of the preschool period, children have developed consistent expectations about their social worlds and act accordingly (Main, 1995; Main & Hesse, 1990). Studies have demonstrated that children’s faulty reasoning about their social relationships can influence inappropriate behavior (Hartup & Laursen, 1993) and can be reinforced by adult responses to child behavior patterns. Research suggests that adults respond with less-than-positive reactions to children who present as “difficult” to manage (Bugental, Blue, & Lewis, 1990), and that these adult responses can set the stage for a further extension of the child’s belief system. Beauchaine et al. (2002) found that parents of children with poor relationship skills were especially deficient in providing solutions to issues of noncompliance, especially when required to do so under pressured conditions. The authors recommend the need for treatment plans to target the underlying processes of negative attribution bias and affect regulation, which they suggest are the pivotal factors that drive coercive parenting patterns.
**Therapeutic implications:** Therapists who use cognitive techniques target maladaptive thinking patterns in order to increase an individual’s ability to recognize and “reframe” or “restructure” negative thoughts into more positive and healthy alternatives. Some common maladaptive patterns are overgeneralization, minimization (of positives), or magnification (of negatives) and all-or-nothing thinking. For example, if Sally cancels our movie date, I might think to myself: “This always happens to me”; “No one wants to be with me,” or on a more positive note, I might think “I guess something came up and Sally had to cancel.” Cognitive programs often include homework assignments that target day-to-day experiences of negative thought–inducing situations and exercises on how to restructure negative thoughts into more positive interpretations. Social skills programs that target problems in social information processing are also helpful in direct instruction of social information processing techniques such as encoding social cues, clarifying social goals, appropriate response selection, and monitoring of the consequences of social actions and reactions (Dodge, 2000).

**Cognitive Behavioral Therapy**

Although it is possible to provide therapeutic interventions based on cognitive or behavioral perspectives, practitioners often combine methods in an approach that focuses on the behaviors and thoughts that drive the behaviors, simultaneously. CBT seeks to facilitate positive integration of thoughts and behaviors. In their recent meta-analyses, Weisz, Doss, and Hawley (2005, 2006) found that the most common treatment approaches included some form of behavior or learning approach, and that among these, CBT was the most frequent treatment for depression. In an earlier study, Weisz et al. (1995) found that an 8-session school-based group CBT program was effective in reducing symptoms of depression, relative to a wait list control group. The program focused on activity scheduling and increasing the likelihood of positive reinforcement. A comprehensive CBT program developed by Stark et al. (1996) emphasized ways to promote positive mood and decrease negative thought patterns using individual and group formats. Individual sessions provided an opportunity for children to discuss topics that may be too embarrassing to bring up in the group, while group sessions allowed for practice in developing social skills within a safe social context.

More recently, Esbjørn et al. (2015) evaluated the use of case formulation for CBT in children (7–12 years of age) with anxiety disorders, under conditions of having parents either as “cofacilitators” or “coclients.” Comparing the success rates to children’s success rates reported for those who received therapy by manualized treatment programs, they found that the case formulation approach to be as successful. They found no difference in whether parents were enrolled as cofacilitators or coclients.
Social Learning Theory

Social learning theory is another theoretical framework that combines cognitive learning theory (learning is influenced by psychological factors) and behavioral learning theory (learning is based on responses to environmental stimuli). Bandura, who was most interested in observational learning or modeling integrated these two theories, suggested four pivotal requirements for learning in the social learning model: observation (environmental), retention (cognitive), reproduction (cognitive), and motivation (both) (Box 1.7).

BOX 1.7 THINKING OUT LOUD

Coercion theory came out of the larger behavioral perspective of social learning theory which at its core has the belief that social relationships are maintained through rewards and positive reinforcement. However, in nonrewarding or aversive social situations, the outcome can be negative, resulting in conflict. While reciprocity and positive social exchange are the outcomes of positive reinforcement, negative exchanges can give way to coercive and aversive reactions that attempt to exercise control over the behavior of the other. Patterson (1982) felt that parents were often responsible for unknowingly reinforcing coercive behavior patterns in their children through acts such as repetitive yelling and nagging when a child continues to be noncompliant, until the parent reaches the point of exhaustion, at which point the parent gives in to the child and the child’s aversive responses are reinforced through negative reinforcement. Children soon learn that if they misbehave long enough, they will eventually be able to control their parents and get their way.

Dumas, LaFreniere, and Serketich (1995) observed interactive control exchanges in dyads involving mothers and children (2.5–6.5 years) who were socially competent, aggressive, or anxious. The exchanges between competent children and their mothers were positive and reciprocal with firm limit setting regarding coercive attempts. Although aggressive children and their mothers engaged in relatively positive exchanges, there were frequent attempts by the children to gain coercive control and poor ability of the mothers (inconsistent and indiscriminant attempts) to effectively manage more extreme forms of coercive behaviors. Exchanges between anxious children and their mothers were predominantly aversive, with mothers using coercive methods, and being unresponsive, and children responding by being resistant and coercive. The study demonstrated that behavior patterns were influenced by both members of the dyads.
Case Formulation Based on Psychodynamic and Attachment Perspectives

From a psychodynamic perspective, individuals must come to terms with three components of their personality: the id (primitive impulses of the libido); the superego (conscience); and the ego, which evolves over time (reality principle). Freud believed that individuals were only aware of a very small portion of their motives and beliefs because the vast majority was hidden from awareness in the subconscious recesses of their minds. Unconscious conflicts would result in individuals developing fixations or regressions to earlier psychosexual stages (oral, anal, phallic, latency, genital) based on earlier unresolved issues, while the ego was often protected through the use of defense mechanisms, such as denial, regression, and repression. Erikson expanded Freud’s theory to include psychosocial stages defined by tasks that were to be mastered by certain developmental levels across the life span. The development of individual identity requires that the individual separate from and develop a sense of self unique to the caregiver. Mahler, Pine, and Bergman (1975) describe this process of separate individuation as a crucial developmental milestone in the first three years of life, culminating in the rapprochement phase, in which the toddler resolves the dilemma of independence without vulnerability by developing a sense of object constancy (the caregiver is a secure source of comfort).

Erikson’s first stage (trust versus mistrust) and Mahler’s sense of object constancy provide pivotal points in development of secure attachment relationships which was later expanded by Bowlby and Ainsworth in their theories revolving around issues of attachment. Ainsworth et al. (1978) conducted a series of experiments involving separation and reunion between mothers and infants, called the Strange Situation experiments. As a result of these studies, two broad categories of responses defined the areas of secure versus insecure attachment. In the secure attachment situation, although infants protested their mother’s leaving, they were able to be soothed by the mother upon her return. Infants who were insecurely attached responded to mother’s leaving and reunion in two different ways. Infants who were “anxiously attached” or “anxious/resistant types” were distressed upon mom’s leaving but were unable to be soothed upon her return, often responding with continued distress evident in arching their backs or crying and squirming. Others, labeled “avoidant attachment,” responded to mom’s leaving and return by ignoring both events. Later, Main and Weston (1981) added a fourth category “disorganized/disoriented attachment,” which they discovered in their work with abused children. These children displayed atypical patterns of inconsistent and contradictory (approach and avoidance) behaviors and volatile emotions. Studies of the outcomes of attachment styles have reasoned that these early patterns may result in embedded templates for future relationships (internal working model, IWM), since studies have found that children who are securely attached are more independent and better problem-solvers than their insecure peers (Sroufe, 2002) who
are at risk for self-representations that see the self as “unlovable and unworthy” (Cicchetti & Toth, 1998).

Bowlby’s interest in the evolutionary importance of infant–caretaker relationships initially envisioned “survival” as the goal to maintaining proximity to the caregiver. He later combined psychoanalytic and ethological insights into a theory of socioemotional development which envisioned early experiences with attachment figures becoming later canalized as emotional responses to others through reference to resulting cognitive representations (internal working model, IWM) of attachment relationships acquired during this early period (Cox, 2013).

However, in the early 1970s, debate began regarding whether insecure attachment was the result of impaired attachment due to insensitive early caregiving or the result of differences in child temperament. Kagan and Snidman (2004) found that motor activity at 4 months of age (low or high reactive) predicted social engagement that remained stable at 2 years of age. Children who were highly reactive to stimuli were socially inhibited, while those that demonstrated low levels of reactivity were socially engaged. However, even in these longitudinal studies, the extremes of behavior noted at an early age modified over time, suggesting the importance of environment as a moderating condition.

Greenberg (1999) has embedded attachment theory in an ecological developmental framework to explain psychopathology resulting from the interplay of factors evident in the child, parent, and environmental context. Drawing on principles of equifinality (different pathways may lead to the same disorder) and multifinality (similar disorders may produce multiple outcomes), Greenberg builds his model drawing on four underlying processes found in theoretical models of attachment: IWM, neurophysiology of emotion regulation, observed behaviors, and functional motivational processes. The degree of security/insecurity inherent in primary attachment relationships provides IWM or templates for all future relationships (Ainsworth et al., 1978; Belsky, 1988; Bowlby, 1982). While secure attachments can be a protective factor, insecure attachments may place the child at increased risk for developing problems.

According to Greenberg, neurological findings (neurophysiology of emotion regulation) suggest that humans require positive experiences of resolving fearful situations to allow for a buildup of brain structures that help to regulate responses to anxiety and fear-producing situations (Siegel, 1999). In dysfunctional attachment relationships, caregivers are not a source of assistance in the regulation of emotion and can become a source of threat. Deficits in the acquisition of mechanisms to regulate emotions result in an inability to self-soothe when upset, thereby reducing the ability to cope in stressful situations. As far as observed behaviors are concerned, Greenberg suggests that avoidance behaviors may serve an instrumental role in the attachment process by acting to control and regulate caregiver proximity and attentiveness. Ultimately, maladaptive attachment patterns can help explain the functional motivational processes that can negatively influence social orientation and subsequent prosocial competencies, including poor social adaptation and withdrawal from social contact. Secure attachments can lead to better understanding rather than avoidance of negative emotions (Laible & Thompson, 1998).
More recently, studies have investigated whether differences in attachment strategies may represent differences in how the brain processes sensory information (Strathearn, 2006). Longitudinal studies have demonstrated that adult attachment patterns, such as those measured by the Adult Attachment Interview (AAI: George, Kaplan, & Main, 1996), can reliably predict maternal caregiving patterns, which in turn can predict subsequent social/emotional development (Sroufe, Egeland, Carlson, & Collin, 2005) and attachment (Shah, Fonagy, & Strathearn, 2010; van IJzendoorn, 1995) in the offspring (Box 1.8).

BOX 1.8 THINKING OUT LOUD

The AAI classifies attachment into categories of secure attachment and insecure attachment. Insecure attachment is further classified as either dismissing or preoccupied. Studies have linked the dismissing type of attachment with difficulties in adolescence in areas of seeking support (overly self-reliant), tendencies to withdraw, lack of trust in others, and weaker social skills (Allen et al., 2002; Larose & Bernier, 2001), while adolescents with the preoccupied type of attachment evidence externalizing traits associated with delinquent activities such as the use of violence and aggression toward the self or others (Bakermans-Kranenburg & van IJzendoorn, 2009).

Strathearn (2011) provides an overview of maternal caregiving behavior that draws on neurobiological sources to help explain maternal neglect. He specifically addresses how “the oxytocinergic and dopaminergic systems” interact to inform the mother how to interpret cues from the infant and how to subsequently respond to those cues. It is his suggestion that oxytocin may be responsive for activating the dopaminergic reward pathways in response to social cues. Strathearn supports his theory with research evidence that mothers who have insecure/dismissing attachment patterns (which have been associated with emotional neglect) evidence “reduced activation of the mesocorticolimbic dopamine reward system in response to infant face cues, as well as decreased peripheral oxytocin response to mother–infant contact” (p. 1054). Furthermore, Strathearn (2011) hypothesizes from an epigenetic perspective that “attachment” patterns may be transmitted intergenerationally, mediated by maternal responses to infant cues that are determined at a neuroendocrine level. The fact that levels of oxytocin and dopamine can be inherited also sets the stage for future patterns of similar types of insecure attachment and future responses to situations that are stressful or those that rely on social engagement. According to Strathearn (2011), “from the emerging field of epigenetics, we are beginning to understand how the caregiving...
environment may influence the development of biological systems and behavioral phenotypes, via stable changes in the regulation of gene expression” (p. 1057).

**Therapeutic implications:** Therapeutic attempts to improve the attachment relationship have remained largely rooted in a psychodynamic approach and have focused primarily on infant–parent psychotherapy (see Lieberman & Zeanah, 1999, for review). Many of the programs are lengthy due to the emphasis on building a therapeutic working alliance with the therapist and the need for extensive ongoing assessments of child–parent or child–caregiver (foster care) interactions and family circumstances. Observations and discussions of joint play provide opportunities for insight-oriented dialogue designed to assist parents in acquiring more appropriate perceptions of their child and developing interactional patterns that have greater empathic attunement with the child’s needs. Based on the belief that obstacles to attachment can occur on several levels (infant, parent, environment), therapeutic goals in these programs are to determine the nature of the obstacles blocking attachment (individual differences) and to design treatment to address these specific areas (Zeanah et al., 1997).

The Seattle Program, developed by Speltz and colleagues (Greenberg & Speltz, 1988; Speltz, 1990), is a parent training program to assist families of children with insecure attachment that melds attachment theory with a cognitive behavioral approach. The program focuses on communication breakdown in the parent–child dyad and emphasizes the need for better “negotiation skills.” The four-phase intervention program includes components of parent education, reframing of the child’s behaviors within a developmental framework, limit setting and problem prioritizing, and communication/negotiation skills.

Although the realm of the unconscious renders many of the psychodynamic therapies without empirical support, the application of psychodynamic principles to play therapy has revealed success of a program, *psychodynamic developmental theory of children (PDTC)*, for children with behavioral issues (Fonagy & Target, 1996). The program has been successful in increasing skills in areas of self-regulation of impulses, capacity to play effectively, and awareness of others (Box 1.9).

**BOX 1.9 THINKING OUT LOUD**

The foundations of psychodynamic theory are rooted in uncovering the internal and often unconscious processes that drive an individual’s behaviors and the IWM responsible for a weakened sense of ego development. As such, the psychodynamic approach is not an easy fit with empirical research. While Messer (2000) has called for the development of databases for case-based research to remedy this problem, Fonagy, Target, Cottrell, Philips, and Kurtz (2002) have provided empirical support for the PDTC approach, which has an 85% success rate for internalizing disorders.
Thinking outside the box: Strathearn (2011) compared secure and insecure mothers’ responses to facial pictures of their infant and reunion with their infant after separation and found that mothers with an insecure/dismissing pattern of attachment may have impaired peripheral and central oxytocin production, which may help to account for the reduced activation of reward processing regions in the brain when presented with facial cues or opportunities for reunion with the infant. Based on results from rigorous experimental studies of the use of intranasal oxytocin in enhancing social responsiveness in areas such as social memory eye gaze and sense of trust, Strathearn is in the process of conducting randomized trials to investigate the potential benefits of intranasal oxytocin in enhancing maternal brain and behavioral responses in mothers with dismissing forms of attachment.

Case Formulation Based on Parenting Style and Family Systems Perspectives

Baumrind (1991) investigated parenting styles or the prevailing attitude and climate evident in the amount of structure and warmth parents provided in the process of parenting and the outcomes that the different styles had on children’s development. Baumrind (1966) suggested three primary parenting styles that captured clusters of parenting behaviors and childrearing goals: authoritative parenting, authoritarian parenting, and permissive (indulgent) parenting. Later, Maccoby and Martin (1983) added a fourth style, neglectful parenting. These parenting styles are characterized by emphasis on various combinations of warmth, demandingness or control, and autonomy granting, although the majority of research has focused on two of the dimensions: warmth and demandingness or control. The combinations evident in each of the styles are as follows: authoritative (high warmth, high control); authoritarian (low warmth, high control); permissive (high warmth, low control); and neglectful (low warmth, low control). The four different parenting styles are graphically illustrated in Figure 1.4.
Most recently, Baumrind, Larzelere, and Owens (2010) emphasized the distinction between the different types of demandingness or control exercised by parents using authoritative versus authoritarian parenting styles. Although both parenting styles are “demanding, forceful, and power-assertive,” the two styles differ in how they exert “power.” “Although both authoritative and authoritarian parents use confrontive discipline, which is firm, direct, forceful, and consistent, authoritarian parents differ from authoritative parents in that they also use coercive discipline, which is peremptory, domineering, arbitrary, and concerned with retaining hierarchical family relationships” (p. 158).

While authoritarian parents are concerned with maintaining status as power, authoritative parents exercise control that is “reasoned, negotiable, outcome-oriented, and concerned with regulating behaviors.” In their study of the longitudinal effects of parenting practices, Baumrind et al. (2010) isolated five different types of coercive practices, including (1) unqualified power assertion, (2) arbitrary discipline, (3) psychological control, (4) severe physical punishment, and (5) hostile verbal criticism. The study compared the emotional health (low level of behavioral problems) and competency (social and academic achievement) of adolescents whose parents employed different types of parenting styles during the preschool period. Results revealed that adolescents reared by authoritarian power-assertive practices evidenced low communal competence, high internalizing problems, and low self-esteem, compared to adolescents reared by authoritative and directive parents who were prosocial and well adjusted.

In most situations, the authoritative parenting approach (high structure and high warmth) is the desired practice and yields the best child outcomes. The authoritarian parenting style, although high on structure, is very low on warmth, and children raised in this type of household may become aggressive and uncooperative. Parents who are uninvolved provide little structure or warmth, and children are prone to develop a number of negative traits, including truancy. Permissive parenting provides warmth but minimal structure. Based on an avoidant attachment pattern and authoritarian parenting practices, parent–child dyads can be thrust into a hostile/helpless pattern, with one member of the dyad being the hostile aggressor and the other member becoming the passive, helpless, and overwhelmed recipient (Lyons-Ruth, Bronfman, & Atwood, 1999; Box 1.10).

BOX 1.10 THINKING OUT LOUD

Is the authoritative parenting style the best style for all children, regardless of environment or culture? Research suggests that the authoritarian parenting style may actually be more suited to raising children who live in neighborhoods that are at increased risk for youth engaging in violent behaviors (Bradley, 1998). Studies have also demonstrated that regardless of culture, stress may be the key variable in moderating parenting style, with increased stress associated with increases in adopting an authoritarian parenting style (Sue & Hynie, 2011).
Parenting style can also interact with other environmental conditions such as socioeconomic status (SES), with lower SES predictive of increased risk for negative child outcomes in areas of academics, behavior, and social difficulties (Dodge, Pettit, & Bates, 1994). However, studies that have included data on maternal education suggest that higher maternal education is associated with better child outcomes regardless of SES (Callahan & Eyberg, 2010; Box 1.11).

In addition to parenting style, family systems theory has also influenced how we conceptualize the family unit as the focus of assessment and intervention. The family unit is composed of many subsystems: parent–child, marriage partners, siblings, extended family, and so on. Within families, behaviors are often directed toward maintaining or changing boundaries, alignment, and power. 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, described several family patterns that can contribute to dysfunction. In enmeshed families, boundaries between family members are often vague, resulting in family members being overly involved in each other’s lives. According to Minuchin, enmeshed families (lacking in boundaries) may see a child’s need to individuate as a threat to the family unit. Triangular relationships are alignments between family members that serve to shift the balance of power and can include the parent–child coalition, triangulation (e.g., mother and sibling, versus father), and detouring (maintaining the child as the focus of the problem to avoid acknowledging other family problems, such as marital conflict).

Research with a focus on the family systems model has been instrumental in developing treatment programs for children (Fosco & Grych, 2013) and adolescents.
(Grych, Raynor, & Fosco, 2004). Research has focused on such issues in children as the influence of family on emotion regulation and the role of parent conflict on children’s conflict appraisal (DeBoard-Lucas, Fosco, Raynor, & Grych, 2010; Fosco & Grych, 2013). Studies with adolescents have covered topics such as the impact of intraparental conflict on adolescents, family cohesion, and subjective well-being (Fosco, Caruthers, & Dishion, 2012; Grych et al., 2004).

**Treatment implications:** Therapists can work with parents to better understand their parenting style and to understand the benefits of adopting a consistent parenting approach that more closely resembles the authoritative parenting style. Within the family systems approach, the family therapist would create an alliance by joining the family and observing family interactional patterns from the inside out. Once the problem has been formulated, the therapist works with the family to restructure the family interactions toward positive growth and change, such as repositioning the balance of power and improving problem-solving and communication.

Several treatment programs have been developed that use family systems theory and principles in conjunction with other therapeutic models and techniques. The following is a discussion of just two of the main bodies of research in this area.

**Parent–Child Interaction Therapy (PCIT)** is a parent management training (PMT) program that was developed for use with individual families to assist in addressing behavioral problems (oppositional defiant and other behavior disorders) in children 2–7 years of age (Eyberg, Nelson, & Boggs, 2008). The program focuses on two significant components: child-directed interaction (CDI) with a goal of enhancing the parent–child relationship and a parent-directed interaction (PDI) component that focuses on increasing child management strategies. PCIT is an evidence-based treatment model that integrates aspects of play therapy and behavior therapy, as well as social learning and family systems theories (Neary & Eyberg, 2002). The program typically involves 12–20 weeks of commitment. The program has been demonstrated to be effective in the treatment of a variety of behavioral problems and there is increasing evidence that the program is as effective when delivered in a group or individual format (Niec, Barnett, Prewett, & Chatham, 2016).

The **Oregon Model** of family behavioral therapy had its beginnings four decades ago (Patterson, Chamberlain, & Reid, 1982) and over the course of time has seen the development of a number of intervention strategies that have been effective in alleviating behavior problems in children and adolescents. Currently, there are three models that have been developed to target needs in specific areas, including the **Family Check-Up (FCU) model**, **Parent Management Training—Oregon (PMTO) model**, and **Treatment Foster Care—Oregon (TFCO) model** (Dishion, Forgatch, Chamberlain, & Pelham, 2016). The Oregon group was one of four research initiatives using family behavior management strategies that spearheaded parent training programs based on core principles that emphasized the role of parents as training agents; observers and recorders of data; and managers of contingency programs. The
research filled an important niche regarding how to assist parents in managing child behaviors in a way that would halt the development of problem behaviors into more serious forms of delinquency and antisocial behaviors. Observations that child outcomes were worse for children whose parenting practices were at either end of the discipline spectrum (overly lax or overly harsh) led Patterson (1982) to develop the coercion model based on coercion theory. Later research demonstrated that coercive cycles emerge slowly from repetitive patterns and cumulative interactions between infants who are very demanding and mothers who are unresponsive and detached. Over time, these demanding infant and disruptive toddler behaviors predict disruptive behaviors in childhood (Keenan & Shaw, 1995).

The Parent Management Training Oregon (PMTO) model contains the underlying interventions and techniques that are used in all of the Oregon models, with a goal to reduce coercive parenting practices and to replace these with positive parenting, through the use of positive reinforcement, setting appropriate limits/discipline, monitoring/supervision, interpersonal problem-solving, and emotion identification and regulation (Dishion et al., 2016). Significant benefits of the PMTO have been documented empirically for youth in areas such as reduced noncompliance, reduced incidences of aggression on the playground and police arrests, and for parents in areas of decreased incidences of coercive parenting and increased use of positive parenting techniques (Forgatch & Patterson, 2010).

The Family Check-Up (FCU) model was designed as an initial stage (intake) to assist families in distress and provide families with feedback concerning the family assessment conducted at that time. Involvement in FCU has been related to increased parental motivation and engagement in the parent training program and reduced coercive conflict as well as antisocial behavior (Stormshak et al., 2011; Van Ryzin & Dishion, 2012).

The Treatment Foster Care-Oregon (TFCO) model was developed as an alternative to group homes or residential placements which have not been successful for a number of reasons (Wilmshurst, 2002), including possible iatrogenic effects (when treatments harm) of aggregating youth with similar problems increasing the opportunities for deviancy training (Poulin, Dishion, & Burraston, 2001). The program was developed for youth who can no longer be managed at home and involves the placement of these youth in special foster care homes under the supervision of foster parents who have been specifically trained in behavioral methods and the consistent application of supervision, modeling, and discipline. The youth are placed in the setting for 6–9 months until ready to be reunited with their family or other longer-term placement. Foster parents are provided with daily and ongoing support. Therapists also work closely with family members to provide parenting skills to enhance opportunities for success upon reunification.
Integrating Theoretical Perspectives: A Transactional Ecological Biopsychosocial Framework

Bronfenbrenner and the Contexts of Influence

Bronfenbrenner’s (1979, 1989, 2005) ecological systems theory was developed to explain the importance of contextual influences on human development and provides an excellent framework for the integration of numerous theoretical perspectives. Bronfenbrenner depicts the child at the center of a series of concentric circles, each circle representing a level of influence. Interactions between the child and the environment are ongoing and transactional, such that changes at one level can influence changes at other levels. The direction of influence is bidirectional in that a child’s behavior can influence a parent and a parent’s behavior can influence the child. For example, in the interaction between the child and its parent, responses have a reciprocal influence and both can be altered in the process. Bronfenbrenner and Morris (1998) have suggested that the model might more appropriately be referred to as a bioecological model to emphasize biological characteristics in the dynamic and ongoing interplay between the child’s characteristics (biological and genetic) and the environmental characteristics (proximal and distal factors) (Box 1.12).

BOX 1.12 THINKING OUT LOUD

In discussing the dynamic interchange between the child’s characteristics and environmental characteristics, it is important to revisit theories of epigenesis and the recent contributions to our knowledge from the field of neuroscience. Within the probabilistic epigenesis framework, individuals with the same genotype can have different neural and behavioral outcomes based on the dissimilarity or uniqueness of their relevant life experiences (Gottlieb, 2007).

The ecological transactional model (Bronfenbrenner, 1979; Cicchetti & Lynch, 1993) can provide an overarching framework for discussing ecological contexts “consisting of a number of nested levels with varying degrees of proximity to the individual” (Lynch & Cicchetti, 1998, p. 235). Initially, Bronfenbrenner proposed three levels of environmental influence: the microsystem, the exosystem, and the macrosystem. The microsystem represents the immediate environment and includes influences of family (caregivers and siblings), teachers, peers, neighborhood, and school settings. Next is the exosystem, which incorporates influences from more distal factors, such as parents’ employment and social economic status. The macrosystem is the outer rim that represents influences resulting from cultural beliefs and societal laws. Bronfenbrenner refers to the communication among factors within the microsystem as the mesosystem, which can be a very potent influence in the child’s ongoing success. Ultimately, a fourth dimension was added, called the
chronosystem, which refers to the cumulative effect of one’s experiences over the course of a lifetime and includes environmental events and important life transitions (such as graduation, change of schools, divorce, birth of a sibling, etc.). Bronfenbrenner’s (2005) ecological system evolved into what he referred to as the Process–Person–Context–Time (PPCT) model comprised of four interrelated components, including developmental process (dynamic interactions/relationship between the individual and the context); person (the individual’s biological, cognitive, emotional, and behavioral characteristics); context of human development (the system of nested influences); and time (temporal aspects that moderate change over the course of development/chronosystem, such as ontogenetic time, family time, and historical time). Bronfenbrenner’s ecological systems theory is presented graphically in Figure 1.5 (Box 1.13).

**FIGURE 1.5** Bronfenbrenner’s Bioecological Systems Theory

Source: Adapted from Bronfenbrenner and Morris (2006).
A Transactional Ecological Biopsychosocial Framework: Risks and Protective Factors

Bronfenbrenner’s model also provides an excellent framework for a discussion of risks and protective factors that can influence development on a number of different levels.

Individual Person

Bronfenbrenner (2005) considered the person to be at the core of the series of concentric circles. Each individual brings unique contributions to the developmental process in terms of their biological, cognitive, emotional, and behavioral characteristics. Research has demonstrated that from a very early age, as young as 4 months of age, temperament (reactivity and self-regulation) can predict social engagement at 2 years of age. Infants who demonstrated high-reactive traits were more likely to evidence shy, timid, and fearful responses to unfamiliar events in their second year (Kagan, 2003, 2004). Evidence of such inborn wiring has led Kagan to believe that different temperamental types are inherited by a distinct neurochemistry that affects the excitability of the amygdala and brain activation, with low-reactive children showing more activation on the left compared to right frontal activation, whereas the reverse was true for high-reactive children who later demonstrated behavioral inhibition (BI). Kagan also suggests that the inability to moderate stress may signal impairment in the GABA (gamma-amniobutyric acid) system which inhibits neural activation in stressful situations and allows individuals to regroup. The hypothesis about GABA malfunction is interesting since impairment in GABA is implicated in many anxiety disorders, and although BI is a temperamental factor, it shares many similarities with social anxiety disorder (SAD) (e.g., wariness, avoidance, and fear). Caouette and Guyer (2014) hypothesize that during childhood, atypical functioning in a number of areas of the brain (i.e., amygdala, basal ganglia, and prefrontal cortex) influences the tendency to develop a cautious approach to unfamiliar situations for individuals with inhibited temperaments. They reason that when children with BI enter adolescence, they are at
increased risk for developing SAD resulting from a conflict between “increased desire for social reward and extreme fear of humiliation or embarrassment…a vulnerability moderated in part by a history of inhibited temperament” (p. 67).

While Kagan believes that BI is directly related to temperament, Cassidy (1994) suggests that emotion regulation strategies (i.e., responses to events and circumstances meant to regulate emotions, through suppression or heightened expression of emotions) are related to an individual’s attachment style. Subsequent longitudinal studies (Schmidt, Nachtigall, Wuethrich-Martone, & Strauss, 2002; Seiffge-Krenke, 2006) conducted regarding insecure attachment patterns (e.g., avoidant/dismissing patterns or ambivalent/preoccupied patterns) have found that individuals with the dismissing pattern tend to consistently use strategies to minimize emotional connectiveness while increasing aggressive responses, compared to those with preoccupied patterns who tend to be more emotionally dependent and use more negative, ineffective emotional coping strategies.

Within the area of attachment, Strathearn (2011) has suggested that the transmission of attachment patterns across generations may be mediated by the mother’s neuroendocrine responses to infant cues, which may in turn set the stage for infant development of similar patterns either genetically or through a social learning process which continues to influence the intergenerational transfer within an epigenetic framework. Strathearn (2011) discusses the strong link between social and parenting behaviors and biological mechanisms such as the oxytocinergic and dopaminergic neuroendocrine systems which is supported by evidence that women who report childhood emotional neglect show significantly reduced levels of oxytocin in their system. Support for the role of oxytocin in social information processing was recently demonstrated in a study of individuals with Asperger’s syndrome (AS). Individuals with AS process information about faces in the same region of the brain that others process information about objects. Domes, Kumbier, Heinrichs, and Herpertz (2014) found that a dose of oxytocin applied through a nasal spray enhanced facial emotion recognition and amygdala reactivity in adults with AS. Strathearn (2011) is currently investigating whether a similar procedure used on mothers who have low oxytocin levels might increase their positive social responsiveness to their infant’s cues.

Other characteristics that can increase the risk for negative outcomes include male gender (Rutter, 1979), physical handicaps (Werner & Smith, 1992), and having a difficult temperament (Bates, Pettit, Dodge, & Ridge, 1998). Protective factors at this level include good intelligence; a positive self-concept; effective emotional and self-regulation; an outgoing style of social engagement; and easy temperament (Kitano, & Lewis, 2005; Masten & Coatsworth, 1998; Passer & Smith, 2004).

**Microsystem**

The microsystem encompasses the most proximal influences, including the child, family, school, peers, and neighborhood. It is at this level of influence that we see how the process
of development unfolds, for better or worse. In an environment of positive and supportive influences, the child learns to trust, develop a secure attachment to the caregiver, and construct an internal working model (IWM) that will serve as a blueprint for social relations with other individuals inside the family (siblings, extended family) and outside the family context (teachers, peers, coaches, and mentors). However, inadequate, inconsistent, or inappropriate parenting styles, poor monitoring of child behavior, peer rejection, or other adverse experiences can have a profound effect on development.

While children who experience risks in their immediate environment (microsystem) are prone to developing externalizing problems, disturbances at the exosystem level—for example, family hardship—can increase the risk for internalizing problems (Atzaba-Poria, Pike, & Deater-Deckard, 2004). We also know that the number of risks experienced can add significantly to the overall risk. For example, the combined effect of social maladjustment and poor academic achievement can result in a multiplier effect that can have a fourfold increase in the risk for long-term adjustment problems relative to the presence of only one risk factor (Burchinal, Vernon-Feagans, & Cox, 2008; Sameroff & Fiese, 2000). Egeland and Sroufe (1981) found that within the immediate environment (microsystem), having an anxious and insecure attachment pattern can place a child at risk for maltreatment (anxious attachment), while an avoidant attachment pattern can increase the risk of physical abuse or having a parent that is emotionally unavailable.

The interaction between biological and environmental factors has also been suggested as a possible mechanism for exacerbating the outcomes of having a temperament high in BI evident in extreme tendencies to avoid social situations. Williams et al. (2009) investigated the role of BI and parenting styles on externalizing and internalizing behaviors in children 4, 7, and 15 years of age. The researchers found that at 4 years of age, children with BI had the most internalizing problems if they were also exposed to a permissive parenting style, while being exposed to an authoritative parenting style reduced internalizing problems over time (Box 1.14).

**BOX 1.14 THINKING OUT LOUD**

Remember from a biopsychological and probabilistic epigenesis perspective, it has been proposed that attachment can also be influenced intergenerationally and that “attachment” or “lack of attachment” messages may be sent to infants by mothers based on neuroendocrine responses (oxytocinergic and dopaminergic neuroendocrine systems) to infant cues that shape caregiving behavior. This dynamic, in addition to any genetic variation, may also influence the infant’s neuroendocrine development and set the stage for infant behavioral response patterns (Strathearn, 2011).
Risk and protective factors can be conceptualized along a continuum where a factor can be considered a risk if it is at one end of the spectrum and a protective factor at the opposite end (Masten & Powell, 2003). For example, while having a positive self-concept can serve as a protective factor and buffer a child from harm, having a poor self-concept can increase the risk for negative outcomes.

Family dynamics and family context can influence development on a number of levels, including a child’s ability to regulate emotions. Fosco and Grych (2013) found that while maternal warmth and sensitivity and having a positive family climate were predictors of the development of positive skills in areas of emotion regulation, interparental conflict was associated with weaker development of emotion regulation in children. Grych et al. (2004) found that for adolescents, a close relationship with their fathers acted as a protective factor and was related to reduced symptoms of maladjustment. DeBoard-Lucas et al. (2010) investigated the relationship between interparental conflict and child self-blame in 150 8–12-year-olds and found that a mother’s coercive or controlling and emotionally unsupportive parenting significantly increased the association between conflict and child self-blame, while emotionally supportive parenting practices and secure attachment with fathers reduced tendencies for child self-blame regarding interparental conflict. DeBoard-Lucas et al. (2010) concluded that “supportive responsive parenting can buffer the effects of interparental conflict on children by reducing self-blaming attributions for parental discord” (p. 163) (Box 1.15).

**BOX 1.15 THINKING OUT LOUD**

While social difficulties can increase the risk for negative outcomes, such as school dropout and delinquency (Blum et al., 2000), gender can make a difference in the nature of these risks. Girls who feel isolated and are without friends are twice as likely to engage in suicidal ideation as girls who belong to a social circle. While girls are protected from suicide by a supportive and cohesive network, for males, sharing activities with friends was a protective factor (Bearman & Moody, 2004).

Parenting style has also been implicated in influencing child behaviors for better or worse. Baumrind’s (1991) work on parenting styles has inspired several studies that have provided support for the notion that authoritative parenting (emphasizing high degree of warmth and democracy/negotiation, with a focus on encouraging autonomy by combining high warmth with high control) has been associated with positive child
outcomes in areas of self-esteem and academic achievement. In their study of over 350 mothers of fourth graders, Fletcher, Walls, Cook, Madison, and Bridges (2008) found that authoritative and authoritarian mothers were less likely to yield to coercive tactics than indifferent or indulgent mothers. In addition, within authoritarian families, tendencies to yield to coercive patterns of behavior resulted in increased problems in areas of internalizing and externalizing, as well as social skills. Within indulgent parenting styles, greater use of punitive discipline was associated with more externalizing problems, while within the authoritarian group more internalizing problems were evident.

Adverse child experiences (ACEs) can include exposure to such negative circumstances as neglect, abuse, domestic violence, and maternal depression and can place children at increased risk for developing a number of negative outcomes. Clarkson Freeman (2014) examined the prevalence of ACEs and the emotional/behavioral outcomes among children (birth to 6 years) in a large national sample using data from the National Survey of Child and Adolescent Well-Being (NSCAW, 2014). Results revealed that 70% of the sample had experienced at least three ACEs and that exposure to three or more ACEs increased the risk of internalizing problems more than four times, while increased risk for externalizing problems was almost four times greater. As a result, Clarkson Freeman advocates for increased screening and early intervention.

Using data from the Adverse Childhood Experiences Study (ACE, 1998), a retrospective investigation of adult reports of early adverse experiences, Anda et al. (2006) report on a number of changes in stress-responsive neurobiological systems as well as brain structure and function resulting from exposure to ACEs. Results support other investigations of impaired memory of childhood experiences. The researchers found that as the ACE score increased, impairment in memory increased, suggesting dysfunction in the hippocampus, as well as impairments in other neurological areas, including “the amygdale, medial prefrontal cortex, and other limbic structures associated with anxiety and mood dysregulation following early abuse” (p. 181).

Exposure to violence (ETV) is highest among ethnic minorities, lower SES youth, and those living in inner cities (Buka, Stichick, Birdthistle, and Earls (2001) and has been associated with increased risk for engaging in violent behaviors (Richters, 1993). As many as 27% of African American youth who have experienced repeated ETV have symptoms of PTSD (Fitzpatrick & Boldizar, 1993). However, risk factors seem to be highest for street children (children socialized into their street role at an early age) compared to nonstreet children (parents take a more supportive role and monitor their activities) who are better equipped to survive in a conventional world (Jarrett, 1998). Case studies in Chapter 7 will discuss some of the outcomes of different ACEs (Box 1.16).
Protective factors in the family that can assist in buffering a child in adverse circumstances include secure attachment; at least one parent or caregiver who is nurturing and emotionally supportive, who provides firm limits and boundaries; authoritative parenting style; parental monitoring; and structured family routines (Alvord & Grados, 2005; Bee & Boyd, 1999; Kerr & Stattin, 2000; Luthar, 2006; Masten, Cutuli, Herbers, & Reed, 2009; Rak & Patterson, 1996).

Other protective factors at this level that can influence positive development include role models outside the family that act as potential buffers; friendships with prosocial peers; a positive school environment; and involvement in afterschool and extracurricular activities (Alvord & Grados, 2005; Masten, 2007; Rak & Patterson, 1996; Box 1.17).

Maxfield and Widom (1996) found that 49% of children who were victims of abuse or neglect were arrested for any nontraffic offense, compared to controls (38%) or committing a violent crime (18% versus 14%). Almost half of the victims of abuse and neglect were arrested for nontraffic offenses by the time they were 32 years of age.

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Alvord and McEwen (2013) discuss why early adverse experiences can alter brain activity due to what they refer to as “biological embedding” resulting from gene–environment interplay that in a sense programs the individual to respond to stressors both internal and external in a certain way. However, they also suggest that it is possible that “adaptive calibration” (e.g., extreme conditions early in life can alter neural and physiological patterns) may have a protective effect in preparing an individual to function better in the expected extreme environment (e.g., an individual living in high-risk and chaotic conditions may become more vigilant and anxious and better able to adapt to a high-risk situation than an individual living in a secure environment who is thrown into adverse conditions).
### Exosystem

The exosystem involves the influences of the community and social institutions (such as government and health care) and prevailing economic conditions (such as employment conditions, inflation rates, and poverty). According to a recent report by the Children’s Defense Fund (CDF, 2014), 21.1% of children were living in poverty (defined as a family of four earning less than $2,019 a month, $466 a week, or $66 a day), while 11.4% were living in extreme poverty (living below half the poverty level). Black and Hispanic children are among those living in the highest rates of poverty, with approximately two in five Black children and three in ten Hispanic children living in poverty in 2014, compared to one in eight white children (Box 1.18).

### BOX 1.18 THINKING OUT LOUD

Children living in poverty are at increased risk for abuse or neglect (22 times more likely), poor health (5 times more likely), and have absences from school in excess of 1½ times compared to those not living in poverty (Maxfield & Widom, 1996).

Protective factors that have been found to exist at this level include availability of economic support for families and good public health care (Alvord & Grados, 2005; Wright & Masten, 2005).

### Macrosystem

The macrosystem is the level of influence that relates to cultural factors or changes in policy that may impact large institutions, such as schools and businesses, on a grand scale. Research concerning the effect of culture on parenting practices has received increased emphasis in the past decade. A large body of research has been accumulated on outcomes associated with the parenting styles, as originally proposed by Baumrind (1966). The authoritative parenting style was initially thought to be the best style of parenting for all parents. More recently, inclusion of cultural influences in dynamics of parenting has suggested that, although this form of parenting can serve as a protective factor for a wide variety of children, its influence is most strongly felt in European American families from middle-class backgrounds. Within this population, positive outcomes have been noted in a number of areas, including self-esteem, social skills, and academic achievement. An authoritative parenting style that includes parental monitoring and supervision can enhance an adolescent’s exposure to positive activities...
and reduce an individual’s chances of engaging in delinquent or high-risk behaviors (Wargo, 2007). A warm but firm approach to parenting allows teens to be independent within the boundaries of developmentally appropriate parental limits. On the other hand, use of the authoritarian parenting style has been associated with increased behavior problems and reduced academic success (Thompson, Hollis, & Richards, 2003).

Although the authoritative parenting style appears to be the gold standard among white families, the authoritarian style of parenting appears to be more common among ethnic minority families than among white families. Researchers suggest that these differences in styles may be related to the influence of culture on parental belief systems and subsequent parenting practices. Although authoritative parenting is less common in ethnic minority families, this parenting style has been linked to adolescent competence across a wide range of families (Steinberg & Silk, 2002), with adolescents in minority families benefiting as much from authoritative parenting as their nonminority peers.

However, within the context of the influences associated with the macrosystem, Chaudhuri, Easterbrooks, and Davis (2009) suggest that “conceptualization of parenting in minority groups provides a broad definition of what cultural context can be a representation of ethnicity, income, immigration experience, and culture” (p. 294). Since different cultural groups support different goals for socialization, it is not surprising to find that childrearing practices vary among these diverse groups (Chao, 2000; Hughes, 2001; Polaha, Larzelere, Shapiro, & Pettit, 2004).

In their study of African American mothers, Cain and Combs-Orme (2005) found that 67% of their mothers (regardless of marital status and family structure) used very strict methods of discipline in authoritarian parenting styles (high control, low warmth) that featured such discipline practices as hitting, intimidation, and belittlement (p. 36). There is some support for the use of strict methods of discipline, especially in environments where parents are using these methods in an attempt to deter the development of high-risk behaviors in dangerous neighborhoods (Bradley, 1998). In another study, focusing on African American adolescent girls living in impoverished communities, Pittman and Chase-Lansdale (2001) found that adolescent girls experienced the most negative outcomes if their mothers were disengaged (low on supervision, monitoring, and parental warmth). However, focusing on a population of predominantly working and middle-class African Americans, Bluestone and Tamis-LeMonda (1999) found that the majority of mothers in that study used an authoritative parenting style, which suggests that different situations and economic conditions are also important considerations when discussing parenting style and ethnicity.

Given the premise that ethnic minorities’ parenting practices may differ from those in families that do not experience some of the hardships associated with minority status, such as poor financial resources, lower educational attainment, and feelings of marginalization due to minority and or ethnic status, Domenech Rodriguez, Donovick, and Crowley (2009) found the more traditional parenting styles (e.g., authoritative) were not as relevant to ethnic minority families. Some of the differences that researchers have found in studies investigating ethnic minority parents are the use of
culturally specific methods of parental discipline and control, lower levels of parental sensitivity, and higher levels of protectiveness (Chao, 1994; Domenech Rodriguez et al., 2009; Mesman, van Ijzendoorn, & Bakermans-Kranenburg, 2012).

Domenech Rodriguez et al. (2009) studied a sample of first-generation, low-income, Latino parents (88% Mexican origin) and their children (4–9 years of age). The researchers found that the four traditional parenting styles used in most studies were not a good fit with Latino families and that expectations for parenting styles differed depending on whether the parent was the mother or father. Using the three dimensions of warmth (support), demandingness (expectations and behavioral control), and autonomy granting (independence, individuation), Domenech and colleagues found that Latino parents in their sample were high on warmth and demandingness, but lower on autonomy granting. Furthermore, there were gender differences in parenting practices with parents granting less autonomy to girls than boys and higher demandingness toward daughters than sons. The majority of parents in this sample (61%) met criteria for “protective parents” (high on warmth and demandingness, low on autonomy granting) (Box 1.19).

BOX 1.19 THINKING OUT LOUD

Domenech Rodriquiez et al. (2009) suggest that different gender effects in their study might be explained by parents’ perceptions of girls maturing earlier than boys and having higher expectations for them as a result. They wondered if the expectations might change as the boys aged.

Although hierarchical parenting (denoting clear guidelines of parental authority) has been associated with externalizing behaviors in European American and families of mixed ethnic origin, for Hispanic-American families, inconsistent parenting has been associated with increases in problem behavior in boys (Lindahl & Malik, 1999). Holtrop, McNeil Smith, and Scott (2015) suggest that in Latino families hierarchical parenting is expected because it embodies the cultural value of respeto or respect which might suggest that the authoritarian parenting style would be more compatible with this value. This has not been supported by the research, however, since application of the authoritarian style in the name of respeto has produced negative outcomes of increased externalizing and internalizing behaviors (Calzada, Huang, Anicama, Fernandez, & Brotman, 2012). Based on the inconsistencies in results with Latino families, Holtrop et al. (2015) suggest that our current knowledge of the relationship between parenting styles and child outcomes in Latino families remains unclear. They
also suggest that findings may also emphasize the need to identify culturally relevant practices when designing and implementing parenting interventions, especially the concept of familism (i.e., emphasis on the family unit).

In a longitudinal study of 444 Chinese American families, Kim, Wang, Orozco-Lapray, Shen, and Murtuza (2013) identified four parenting profiles: supportive, tiger parenting, easygoing, and harsh parenting. Rather than evaluate parenting style along the typical two dimensions (control and warmth), Kim et al. (2013) used a multifaceted approach, which considered both positive (parental monitoring and democratic parenting) and negative (psychological control and punitive control) aspects of parent control and two forms of parent emotional responsiveness (warmth and hostility). In this model, warmth and hostility are not considered as extremes of the same concept, but two different dimensions. Within this context, tiger parenting was associated with high warmth and high hostility, compared with easygoing parenting (low warmth, low hostility), supportive parenting (high warmth, low hostility), or harsh parenting (low warmth, high hostility). As for forms of parental control, researchers compared confrontative control with coercive control (which could be either punitive or psychological). Finally, they added the dimension of “shaming” which they found to be highly important in the Chinese culture. Results of their study revealed that although “supportive parenting, which is most beneficial for adolescent adjustment, includes higher extent of shaming than easygoing parenting, although not as high as the level of shaming in tiger or harsh parenting” (p. 15). Results indicated that the supportive parenting profile was the most common parenting style, followed by easygoing, tiger parenting, and harsh parenting (in that order). Supportive parenting, the most common form of parenting, had the best developmental outcomes, followed by easygoing parenting, tiger parenting, and harsh parenting. Contrary to popular belief, Kim et al. (2013) found that tiger parenting was not the most typical parenting profile among Chinese American families, nor did it produce the best outcomes for adjustment in Chinese American adolescents. Compared to adolescents reared under a supportive parenting style, adolescents whose parents had a tiger parenting profile reported less of a sense of family obligation and obtained lower educational outcomes, including GPA. The concept of the tiger mother will be revisited in Chapter 4, the case study of Shirley Yong (Case 14; Box 1.20).

BOX 1.20  OUTCOMES OF TIGER PARENTING

In the study by Kim et al. (2013), adolescents who were raised by tiger parenting reported more academic pressure, greater sense of alienation (lack of belongingness), and more depressive symptoms.
According to Baumrind (2012) research on culture and parenting styles has identified “culturally syntonic practices that would be described as confrontational but not coercive,” including the following: the “training practices of Chinese American parents”; “the emphasis on prompt compliance by African American parents”; the emphasis on “respect by Latin American parents”; and the emphasis on “deference by conservative European American parents” (p. 186). Although these processes of “directive parenting” may look authoritarian on the surface (forceful and confrontational), they are not because they are not coercive and are responsive and child oriented. As such, Baumrind suggests that the “directive style” may be the universal parenting style that will be associated with increased levels of competence linking a family’s situational and cultural factors with parent authority and child autonomy. The emphasis in future research should be, according to Baumrind, on identifying the “indigenous family patterns specific to a variety of cultural contexts” (p. 186).

Durlak (1998) conducted a meta-analysis of over 1,000 prevention outcome studies and reported the findings regarding the following breakdown of risks and protective factors within the context of Bronfenbrenner’s ecological model. In a more recent review, Eriksson, Cater, Andershed, & Andershed (2010) conducted an extensive review of the reviews on literature (30 different meta-analyses) regarding protective factors that can buffer children and adolescents from externalizing and internalizing problems. The risk and protective factors from both studies are summarized in Table 1.1.

**Resilience**

A discussion of risks and protective factors naturally leads to a discussion of the concept of resilience. **Resilience** has been defined as “the capacity for adapting successfully in the context of adversity, typically inferred from evidence of successful adaptation following significant challenges or system disturbances” (Masten & Monn, 2015, p. 6). As a result, studies of resilience have studied children in high-risk conditions (adversity) who manage to adapt successfully and have tried to uncover what protective factors can support this trajectory of positive growth.

Although the topic of resilience has attracted research attention for quite some time, the concept remains elusive in some respects because of diverse approaches to defining, operationalizing, and measuring it. As a result, it has been difficult to collate data across different studies (Masten & Gerwitz, 2006). Researchers studying risk factors that can contribute to adversity have measured diverse sources of potential stressors, including aspects such as low SES, low birth weight, number of adverse life events, and parent divorce. Yet despite the diversity of measures used, results point to a number of common outcomes (Luthar, Cicchetti, & Becker, 2000).
Masten (2001) summarizes results of studies on resilience that have focused on two different methodologies: *variable-focused studies* and *person-focused studies* (comparing groups of children living in the same adverse conditions who are resilient versus those who are not resilient). Some of the outcome measures used for variable-focused studies have included academic achievement and measures of prosocial behavior (peer acceptance) and psychopathology (deviant behavior, internalizing behaviors). Information from these studies has isolated a number of protective factors that have been associated with resilience. While effective parenting practices (e.g., authoritative parenting, monitoring, support) have been associated with the best social and behavioral outcomes, intellectual functioning has been associated with both academic success and behavioral control. However, since intelligence includes a wide variety of skills and skill subsets (such as executive functions) that may also influence self-regulatory process, Masten (2001) suggests the need to further investigate the underlying processes.

<table>
<thead>
<tr>
<th>Environmental Context</th>
<th>Risk Factor</th>
<th>Protective Factor</th>
</tr>
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<tbody>
<tr>
<td><strong>Child characteristics</strong></td>
<td>Early-onset problems</td>
<td>Social competence</td>
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<td></td>
<td>Difficult temperament</td>
<td>Self-efficacy</td>
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<td></td>
<td>Behavioral inhibition</td>
<td>High intelligence</td>
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<tr>
<td><strong>Microsystem</strong></td>
<td>Family:</td>
<td>Family:</td>
</tr>
<tr>
<td></td>
<td>Harsh or punitive discipline</td>
<td>Positive parent-child relationship</td>
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<td></td>
<td>Marital problems</td>
<td>Maternal sensitivity</td>
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<td></td>
<td>Family psychopathology</td>
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<td></td>
<td>School:</td>
<td>School:</td>
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<td></td>
<td>Poor-quality schools</td>
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<td></td>
<td>Peers:</td>
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<td></td>
<td>Negative peer influence</td>
<td>Positive peer influence</td>
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<td></td>
<td>Negative role models</td>
<td>Positive role models</td>
</tr>
<tr>
<td></td>
<td>Neighborhood:</td>
<td>Neighborhood:</td>
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<td></td>
<td>Poor resources</td>
<td>Adequate resources</td>
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<td></td>
<td>Violence</td>
<td>Safe</td>
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<td><strong>Exosystem</strong></td>
<td>Poverty</td>
<td>Lack of financial hardship</td>
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<td><strong>Macrosystem</strong></td>
<td>Poorly administered schools</td>
<td>Effective school policies</td>
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<td></td>
<td>Cultural conflict</td>
<td>Cultural acceptance</td>
</tr>
</tbody>
</table>
In her review of results from person-focused studies (resilient group versus nonresilient group), Masten (2001) states that at an early age, individuals in the resilient groups shared better parenting skills and had an easy temperament. As they progressed in school, they demonstrated more academic success and had better self-perceptions and better social adjustment than their nonresilient peers (Box 1.21).

**BOX 1.21  PROTECTIVE FACTORS AND RESILIENCE**

Some common elements in resilience research have isolated several factors that seem to contribute to the development of resilience despite living in adverse conditions, including positive, supportive caregivers; positive views of self; motivation to succeed; and cognitive and self-regulatory skills (Masten, 2001).

**Resilience and Neurobiology**

Alvord and McEwen (2013) discuss resilience within a neurobiological framework and within this context define resilience as the “ability of an organism to withstand environmental challenges to normal function, and as such, successful allostatic responses can directly contribute to resilience by providing stability in a changing environment” (p. 338). They describe *allostasis* as the mediators that the brain activates in order to regain homeostasis when stressors are detected. Although the process when working should result in a smooth transition to a steady state, being bombarded by a constant influx of stress can cause a system to *allostatic overload* resulting in overuse of the system and dysregulation (wearing down the system) (Box 1.22).

**BOX 1.22  RESILIENCE AND THE BRAIN**

In addition to the important role of hormones in communicating between body and brain, Alvord and McEwen (2013) identify key areas of the brain associated with regulation of the stress response: hippocampus (central role in learning, memory, and mood); prefrontal cortex (PFC; regulation of executive function, inhibitory control, and cognitive flexibility); and the amygdala (AMY; regulation of emotions, aggression, and affect related to learning and memory, as in fear conditioning).
Alvord and McEwen (2013) discuss how the interaction between genetics and early environmental experiences plays an important role in setting the stage for how an individual will respond to stressors later in life, based on previous areas of the brain activated in areas of emotionality and cognition, especially the PFC, AMY, and hippocampus.

Resilience and Maternal Depression

Numerous studies have reported negative outcomes for children and youth who are raised by depressed mothers. Risks that have been reported include social withdrawal (Yan & Dix, 2014); the acquisition of inappropriate social skills (Carter, Garrity-Rokous, Chazan-Cohen, Little, & Briggs-Gowan, 2001); increased risk for psychopathology (Gotlib, Joormann, & Foland-Ross, 2014); and evidence of dysfunctional physiological systems associated with the ability to manage stress and engage in social relationships such as cortisol response (Waters et al., 2013) and oxytocin production (Apter-Levy, Feldman, Vakart, Ebstein, & Feldman, 2013). For example, Lupien, King, Meaney, and McEwen (2000) demonstrated that children's levels of cortisol are correlated with their mother's SES and depressive symptoms.

Individual characteristics that have emerged as protective factors which can buffer a child from the impact of having a depressed mother are having an easy temperament (as opposed to difficult temperament) and having a higher IQ (Compas, Langrock, Keller, Merchant, & Copeland, 2002; Dix & Yan, 2013). At the family or environmental level, depressed mothers who demonstrate warmth, caring and support, and a minimum of negativity reduce the impact of their child's risk for adverse outcomes (Wang & Dix 2013).

Alvord and McEwen (2013) discuss evidence of hyper/hypocortisol reactivity in children of depressed mothers, using a model of allostatic load. Apter-Levi et al. (2016) also use the same model to address malfunctions in the children's HPA system, in their study of chronically depressed mothers and their children. Collecting data over a period of six years, Apter-Levi et al. (2016) found that hyper or hypo levels of cortisol and HPA malfunctions were related to the mother's lack of sensitive caregiving which did not provide opportunities for children to develop a sense of security or appropriate social responsiveness. In addition, these malfunctions were also directly related to negative parenting practices (anger, negative affect, hostility, anxiety, depressed mood) and unpredictable mood swings (parent vacillating between displaying incidents of negative mood or anger and incidents of withdrawal). Due to these negative practices and unpredictable mood swings, children would be forced to be in a state of constant vigilance in order to adapt to erratic changes in the mother's mood and behavior. As a result, Apter-Levi et al. (2016) suggest, "It is thus possible that children with a biological propensity for social withdrawal and behavior inhibition who are reared by more negative mothers are less able to develop flexible HPA system functioning which may lead to a socially-withdrawn style that places these children at a greater risk for later psychopathology" (p. 54).
Yan (2016) investigated the role of three agentic processes (autonomy/self-assertion, effortful control, and motivation mastery) on children’s resilience (academic, social behavioral) in a longitudinal study (infancy to first grade) in a large national sample of children of depressed mothers. Results revealed that **effortful control** was the single most reliable predictor of resilience across all areas assessed (social, emotional, behavioral, and academic). Yan suggests that high levels of effortful control allow individuals to regulate their emotions (emotion-focused coping, especially in stressful interactions with the mother) and regulate and plan behaviors allowing them to engage in socially appropriate ways. Children high on self-assertion were resilient in three areas: social competence, internalizing behaviors, and externalizing behaviors. Yan believes that children high on autonomy are more self-assertive and interact with their mother in ways that promote negotiation and self-assertive communications. Motivation mastery related to only one area of resilience which was academic competence.

Yan (2016) investigated patterns and interrelationships between the three agentic processes and resilience and suggests the following important factors that contribute to resilience in children with depressed mothers: high intelligence, child temperament, maternal sensitivity, and quality of child care. High intelligence in early childhood was predictive of greater self-assertion, effortful control, and mastery motivation throughout the study, which in turn predicted resilience in all areas measured (academic, social, behavioral). Children with less difficult temperaments were also higher on effortful control and self-assertion which were predictive of resilience in all areas of competence. Sensitive parenting was also significantly related to self-assertion, effortful control, and mastery motivation, which in turn predicted resilience. Finally, the opportunity to attend high-quality childcare facilities was related to effortful control which was a strong predictor of resilience. This is an important finding for treatment interventions and prevention, because it suggests that extra-familial environments may assist in developing child qualities, such as effortful control, which can foster resilience at a time when the mother is experiencing challenges due to chronic depression.

**Resilience: Intervention and Prevention**

Research regarding promoting resilience in children has focused on two important factors: individual characteristics and influences from family and parenting practices. At the level of individual characteristics, several important factors have been identified. The study by Yan (2016) provides important information regarding potential avenues for promoting resilience in children who are faced with living in adverse conditions. Interventions that are focused on enhancing the key processes that are linked to resilience, such as effortful control and self-assertion, could lead to increased positive, active engagement, and adaptive functioning. In addition, these qualities can be targeted both in enhancing parenting practices and extra familial contexts (good day care and school programs). Prilleltensky, Nelson, and Peirson (2001) suggest that children’s sense of “personal control, empowerment, and self-determination” are important aspects to target in programs aimed at increasing psychological well-being and positive
mental health. The researchers suggest that these qualities can be enhanced by providing opportunities for children in three important areas: (1) material resources (nutrition, housing, stimulation) and psychological resources (secure attachments, empathy, and exercising problem-solving abilities) necessary to satisfy basic needs; (2) chances to engage in meaningful decision-making to enhance self-determination; and (3) targeting growth in areas of increased competence and self-efficacy.

The “FRIENDS for life” program (Barrett, 2004a, 2004b) was initially developed as a group treatment program for children with anxiety disorders and was later adapted into a school-based universal prevention program. The goal of the program is to build emotional resilience in children by teaching them skills to cope effectively with feelings of anxiety and depression. The program is based on cognitive behavioral methods and has been used extensively throughout the world. Studies have been conducted in Australia (Iizuka, Barrett, Gillies, Cook, & Miller, 2014; Stallard, Simpson, Anderson, Hibbert, & Osborn, 2007), the Netherlands (Kösters et al., 2012), the United States (Briesch, Sanetti, & Briesch, 2010), Ireland (O’Brien et al., 2007), South Africa (Mostert, 2007), and the United Kingdom (Rodgers & Dunsmuir, 2015).

The “FRIENDS” acronym stands for Feelings; Remember to relax; I can do it; Explore solutions and coping step plans; Now reward yourself; Don’t forget to practice; and Stay calm for life. The program has 10 weekly sessions and 2 booster sessions which are conducted 1 and 2 months after the program is completed. There are also two parent sessions during the 10-week program. Coping techniques used include psychoeducation, relaxation exercises, exposure, social support training, problem-solving skills training, and cognitive restructuring exercises.

Studies have demonstrated that the FRIENDS program can be successful in enhancing self-concept (Stallard et al., 2005, 2007), coping skills (Stopa, Barrett, & Golingi, 2010), social skills (Liddle & Macmillan, 2010), reduction in symptoms of anxiety and depression (Stallard et al., 2005), and improvements in BI and social-emotional strength (Pahl & Barrett, 2010).

Having a positive, supportive caregiver can enhance opportunities for resilience in the face of adversity. Studies that have focused on improved caregiving have used several parent training programs to assist parents in developing better skills in areas of emotional communication and appropriate uses of positive reinforcements. According to Bai and Repetti (2015), engaging in warm, responsive, and supportive family interactions may cultivate resilience in children through exposure to positive emotional and physiological stress response systems.

PCIT is a widely used, evidence-based treatment for parents of children who have disruptive behavior disorders (Funderburk & Eyberg, 2011). PCIT involves 15 weekly sessions and is divided into two phases. The first phase, CDI, focuses on improving the quality of the parent–child relationships by strengthening the parent’s ability to actively attend to and reinforce positive child behaviors, while ignoring negative behaviors. The acronym PRIDE is used to relate to skills in five different areas: Praise, Reflection, Imitation, Description, and Enthusiasm. Parents practise these skills while learning to
follow their child’s lead in dyadic play sessions. In the second phase, PDI, parents take over the lead in play and real-life situations which focus on the importance of their child obeying their instructions and requests. Compliance is rewarded with praise, while the consequence for noncompliance is time out. Sessions involve direct coaching of parent–child interactions. Skills are introduced in a parent–only session and then skills are practiced in the parent–child dyad the following session. Coaching takes place using a wireless earphone and one-way mirror.

The Triple P Positive Parenting Program is another widely used and empirically supported parent training program that can be administered on a variety of prevention levels from Level 1, universal prevention (media-based information for parents) to Level 5, intensive individually tailored family programs for children with major behavioral issues within the context of family dysfunction. This behavioral family intervention program is based on principles of social learning (Patterson, 1982) and has been adapted to serve five different developmental stages (infants, toddlers, preschoolers, school-aged children, adolescents). Parents at Level 4 (parents of children with more severe behavior problems who want intensive parent training) have the opportunity to take part in one of four different types of programs: Standard Triple P (individual parents may be involved in face-to-face or phone consultations, home visits, or be self-directed); Group Triple P (groups of 10–12 parents); Group Teen Triple P; or Self-directed Triple P (parenting workbooks are provided for a 10-week self-help program). Core parenting skills taught in the programs include observation skills, managing misbehavior, preventing problems in high-risk situations, self-regulation skills, and mood management and coping skills (Sanders, Markie-Dadds, & Turner, 2003).

Thomas and Zimmer-Gembeck (2007) conducted a meta-analysis of 24 studies from the United States and Australia to evaluate and compare the outcomes of PCIT and Triple P Positive Parenting Programs. The studies consistently found positive outcomes for both programs, although the outcomes varied depending on the length of intervention, components use, and the sources of outcome data. Both programs were successful in reducing child behavior problems and parenting problems. Parent reports found large effect sizes for PCIT and majority of Triple P Positive Parenting Programs. An abbreviated version of the PCTT had moderate effect sizes in one study, while Level 1 intervention for the Triple P (Media Triple P) had small effects.

References


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