CHAPTER 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 Psychological 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 #25*), will often reenact traumatic experiences through repetitive play, adolescents like Jason Coleman (*Chapter 7; Case #24*) and Juan Hernendez (*Chapter 7; Case #23*) may respond by engaging in high-risk behaviors (e.g., theft, fast driving, moving in with a girlfriend and leaving home). 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. 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).

6. *What are externalizing behaviors and are they comorbid as well?* Externalizing, or *undercontrolled behaviors,* are referred to in the *DSM-5* as the *disruptive behavior disorders:* oppositional defiant disorder (ODD) and conduct disorder (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 the some of the same risk factors. Neesha is 10 years of age and Tyrone is 15 years of age. 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.

Whereas 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 like 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). 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* (Mash & Terdal, 1997; Cipani & Golden, 2007), *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) and 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 and social, 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, and 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 or intervention. The three stages of the case formulation are

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 allow 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 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 Thinking Out Loud

Sections titled "Thinking Out Loud" will provide opportunities to consolidate information, identify areas for further exploration, and assist in working through the process of case formulation.

Although case formulation involves three stages, it is a dynamic and ongoing process that has a built-in capacity for flexible thinking and revision at all stages. In this way, case formulation can become case *reformulation,* allowing for ongoing refinement and evaluation of problem areas and treatment plans.

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 GABA (gamma-amniobutryic acid), 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 hypothalamus-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 amygdale functioning in individuals with autism spectrum disorders.

Box 1.2 Thinking Out Loud

When considering the biological perspective, it is important to consider the principle of *epigenesis,* a concept that had its origins in biology but has been adapted by psychology to explain how interactions between organisms and their environment can transform both entities in the process. There are two variations on the theme of epigenesis: *deterministic epigenesis* and *probabilistic epigenesis.* Deterministic epigenesis was a concept that was originally supported by such theorists as Freud and Erikson, who believed strongly that developmental stages were predetermined and that there was a direct link between biology (genes) and structure (behavior) such that biology was destiny. However, more contemporary theorists, such as Gottlieb (2007), support a probabilistic epigenesis approach, which speaks to the theory that "there are bidirectional influences" (p. 1), such that biology is not destiny because one can reduce the impact of a genetic inheritance (e.g., heart problems) by intervening in the process (e.g., taking medications to reduce cholesterol, and changing exercise and diet). Within the probabilistic epigenetic framework, biology is not necessarily destiny (Greenberg & Partridge, 2003).

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 (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 by either blocking the reuptake of serotonin (SSRIs medications), or by blocking the reuptake of serotonin and norepinephrine (SNRIs medications).

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 (IWM) from interactions with caregivers to other social situations. White and colleagues (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, *insecure 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 *unwantable*" (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 adheres 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 *outcomes*" (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 (FBA) are routinely conducted in the schools (Plotts & Lasser, 2013) with the goal of developing behavioral intervention plans (BIP) 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 oppositional defiant disorder). 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 that 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) that evokes a neutral response (NR): for example, 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 of which I am afraid. 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 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. 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 de-condition 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.

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.

Box 1.4 Thinking Out Loud

According to Cipani and Golden (2007), "In a functional behavioral treatment, the function of the presenting problem needs to be disabled, while an alternate function (that is more acceptable) needs to be enabled. To determine how such consequences should be altered, a behavioral case formulation, relying heavily on ascertaining the social and environmental function of the presenting problems, is needed" (p. 539). In their case presentation, Cipani and Golden discuss a case of avoidant behaviors (academic tasks) manifesting in aggressive responses. The case concerns a severely disruptive boy, in the third grade, who was placed on home instruction due to violent outbursts in the classroom. The child had a history of abuse resulting in lack of attachment, poor emotion regulation, and an inability to perform academically. In this case, it was crucial to reduce the academic load (difficulty level) and reward success with stars that were later traded for time volunteering in the first-grade class (a teacher with whom he had a very good rapport), which served as a positive reinforcement. This combination proved successful and after 3 months, the child was attending school on a regular half-day basis.

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 behavior intervention plans that can be monitored, and modified if needed.

Box 1.5 Thinking Out Loud

Although Mash and Terdal (1997) argue against narrowly contrasting BSA with more traditional assessment approaches, they do suggest some fundamental conceptual differences between the two approaches. The BSA approach tends to focus on state (situation-specific patterns of behavior) versus trait (underlying personality dynamic) characteristics, and ideographic versus nomothetic comparisons, and places emphasis on stability and discontinuity over time versus consistency and stability of underlying causes.

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 a cognitive–behavioral approach to 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 a functional behavioral assessment (FBA) to determine the

antecedents and consequences of specific behaviors (ABCs). 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 behavioral intervention plan (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 or 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, for example, "what works for an individual in a given context" (p. 415). Sattler (2014) provides a seven-step guideline for conducting a functional behavioral assessment: *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, noting the following: *the type of behavior; where the problem occurs; when the problem occurs; characteristics of the antecedent events or 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 teachers' or parents' understanding of the nature of the problem behavior; student's attitude about the learning environment; student attitude about his or 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 (irritability, control, and impatience) in dealing with child problems (Malphurs, Field, Larraine, Pickens, & Pelaez-Nogueras, 1996).

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 (a) an availability deficit (limited repertoire) or (b) 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, Strassberg, Kees, and Drabick (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), 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. Cognitive–behavioral therapy (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, Weiss, Han, Granger, and Morton (1995) found that an eight-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, Swearer, Kurkowski, Sommer, and Bowen (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 and colleagues (2015) evaluated the use of case formulation for cognitive–behavioral therapy in children (7–12 years of age) with anxiety disorders, under conditions of having parents either as co-facilitators or co-clients. Comparing the success rates to children's success rates reported for those who received therapy by manualized treatment programs, they found the case formulation approach to be as successful. They found no difference in whether parents were enrolled as co-facilitators or co-clients.

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, suggesting four pivotal requirements for learning in the social learning model: observation (environmental), retention (cognitive), reproduction (cognitive), and motivation (both).

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 such acts 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 to 6.5 years of age) 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 lifespan. 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 3 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 evolving around issues of attachment. Ainsworth, Blehar, Waters, and Wall (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 models* [*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 models: 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 who 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: internal working models, neurophysiology of emotion regulation, observed behaviors, and functional-motivational processes. The degree of security or insecurity inherent in primary attachment relationships provides *internal working models* 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 build-up 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 Thinking Out Loud

The Adult Attachment Interview (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 care-giving 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 or 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 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, 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 behavioural 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 and 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 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 internal working models 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, Phillips, 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 behavioural 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. In 1966, Baumrind 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).

Most recently, Baumrind, Larzelere, & 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: (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 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 & Eyeberg, 2010).

Box 1.11 Thinking Out Loud

The Eye of the Tiger: What is Tiger Parenting?

The term *tiger parenting* made its way to North America when Amy Chua (2011), a Yale law professor, published *Battle Hymn of the Tiger Mother.* The term "tiger mother" originated in China and is well known in Asia. Chua chronicles how her Chinese heritage prepared her to raise her daughters with strict policies that were driven by the goal to succeed academically (be a straight-A student). The girls were not allowed to watch TV, play games on the computer, or participate in sleepovers. As a result, Chua reasons they were highly successful academically and accomplished musicians. Although there are similarities between tiger parenting and authoritarian parenting, in the focus on adherence to strict rules and routines, tiger parenting also includes the positive element of "support" (Kim, 2013).

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). 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 such topics 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 to 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, behavior therapy, as well as social learning and family systems theories (Neary & Eyberg, 2002). The program typically involves 12 to 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 4 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: the Family Check-Up Model; Parent Management Training–Oregon model; and Treatment Foster Care–Oregon 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, 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) lead 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 and Shaw, 1995).

The *Parent Management Training Oregon Model* (PMTO) 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, and discipline; monitoring and 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 such areas 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*) was designed as an initial stage (intake) to assist families in distress and provides 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 Model* (TFCO) was developed as an alternative to group homes or residential placements that have not been successful for a number of reasons (Wilmshurst, 2002), including possible iatrogenic effects 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 to 9 months until ready to be reunited with their family or other longer term placement. Foster parents are provided with daily and on-going 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 BIO-PSYCHO-SOCIAL 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 his or her 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 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, the neighborhood, and school settings. Next is the exosystem, which incorporates influences from more distal factors, such as parents' employment and socioeconomic 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). Bronfenbrenner's (2005) ecological system evolved into what he referred to as the Process-Person-Context-Time (PPCT) Model comprised of four interrelated components: *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).

Box 1.13 Thinking Out Loud

Mesosystem Effects. If parents and teachers communicate regularly and share the same goals for the child, the potential for academic success will increase significantly. Conversely, poor communication between home and school has been associated with increased risk for academic difficulties. Similarly, if both parents share the same goals in their communications with the child, the child will benefit from the consistency in the message. Bronfenbrenner referred to the system of communication between influences in the child's microsystem as *mesosystem effects.*

A TRANSACTIONAL ECOLOGICAL BIO-PSYCHO-SOCIAL 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). Evidence of such in-born wiring has led Kagan to believe that different temperamental types are inherited by a distinct neurochemistry that affects the excitability of the amygdale, 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 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 behavioral inhibition (BI) is a temperamental factor, it shares many similarities with social anxiety disorder (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 social anxiety disorder (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).

Whereas Kagan believes that behavioral inhibition 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 used 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 that continues to influence the intergenerational transfer within an epigenetic framework. Strathearn 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 oxycontin 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 (Alvord & Grados, 2005; Kitano & Lewis, 2005; Masten & Coatsworth, 1998; Passer & Smith, 2004).

Microsystem

The *microsystem* encompasses the most proximal influences, including the child's 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.

Whereas 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 who 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 behavioral inhibition (BI) evident in extreme tendencies to avoid social situations. Williams and colleagues (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, whereas being exposed to an authoritative parenting style reduced internalizing problems over time.

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.

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).

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 whereas 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, Raynor, & Fosco (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, Fosco, Raynor, & Grych (2010) investigated the relationship between interparental conflict and child self-blame in 150 8- to 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. concluded that "supportive responsive parenting can buffer the effects of interparental conflict on children by reducing self-blaming attributions for parental discord" (p. 163).

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 and 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 and behavioral outcomes among children (birth to 6 years of age) in a large national sample using data from the 2014 National Survey of Child and Adolescent Well-Being (NSCAW). 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 4 times, while increased risk for externalizing problems was almost 4 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, & 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 posttraumatic stress disorder (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 non-street 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 discuss some of the outcomes of different adverse child experiences.

Box 1.16 Thinking Out Loud

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% vs. 14%). Almost half of the victims of abuse and neglect were arrested for nontraffic offenses by the time they were 32 years of age.

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 (Bee & Boyd, 1999; Alvord & Grados, 2005; Kerr & Stattin, 2000; Luthar, 2006; Masten, Cutulti, 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 after school and extracurricular activities (Alvord & Gados, 2005; Masten, 2007; Rak & Patterson, 1996).

Box 1.17 Adverse Child Experiences and the Brain

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 or 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 2 in 5 Black children and 3 in 10 Hispanic children living in poverty in 2014, compared to 1 in 8 White children.

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, 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 have 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 and 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 discussion parenting style and ethnicity.

Given the premise that ethnic minorities' parenting practices may differ from those in families who 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; Mesman, van IJzendoorn, & Bakermans-Kranenburg, 2012; Domenech Rodriguez et al., 2009).

Domenech Rodriguiez et al. (2009) studied a sample of first-generation, low-income, Latino parents (88% Mexican origin) and their children (4 to 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 Thinking Out Loud

Domenech Rodriguez 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, easygoing, and harsh. 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, 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 "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 parenting, 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, in the case study of Shirley Yong (Case 14).

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 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, and 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.

Table 1.1 Summary of Risks and Protective Factors

Environmental Context	*Risk Factor*	*Protective Factor*
Child Characteristics	Early onset problems	Social competence
	Difficult temperament	Self-efficacy
	Behavioral inhibition	High intelligence
Microsystem	*Family:* Harsh or punitive discipline Marital problems Family psychopathology	*Family:* Positive parent–child relationship Maternal sensitivity
	School: Poor-quality schools	*School:* Good-quality schools
	Peers: Negative peer influence Negative role models	*Peers:* Positive peer influence Positive role models
	Neighborhood: Poor resources Violence	*Neighborhood:* Adequate resources Safe
Exosystem	Poverty	Lack of financial hardship
Macrosystem	Poorly administered schools Cultural conflict	Effective school policies Cultural acceptance

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 such aspects as low socioeconomic status (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, 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. Whereas 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.

In her review of results from person-focused studies (resilient group vs. non-resilient 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 social adjustment than their nonresilient peers.

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 they 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 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 amygdale (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 prefrontal cortex (PFC), amygdale (AMY), and the 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), as well as evidence of dysfunctional physiological systems associated with the ability to manage stress, and engagement 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 socioeconomic status and depressive symptoms.

Individual characteristics that have emerged as protective factors that 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, 2014). 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 or hypo cortisol 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 6 years, Apter-Levi et al. 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 that "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 child care 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 extrafamilial 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 extrafamilial 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 two booster sessions that 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; Stallard et al., 2007), coping skills (Stopa, Barrett, & Golingi, 2010), social skills (Liddle & Macmillan, 2010), reduction in symptoms of anxiety and depression (Stallard et al., 2005), as well as improvements in behavioral inhibition and socioemotional 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 (2010), engaging in warm, responsive, and supportive family interactions may cultivate resilience in children through exposure to positive emotional and physiological stress response systems.

Parent–Child Interaction Therapy (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, child-directed interaction (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 practice these skills while learning to follow their child's lead in dyadic play sessions. In the second phase, parent-directed interaction (PDI), parents take over the lead in play and real-life situations that focus on the importance of their child obeying their instructions and requests. Compliance is rewarded with praise, while the consequence for noncompliance is a 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-age 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 used, 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 PCIT had moderate effect sizes in one study, while Level 1 intervention for the Triple P (Media Triple P) had small effects.

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CASE 1

Terry Hogan

The Avoidance Trap: Developing a Case Formulation

The Avoidance Trap

Terry's fourth-grade teacher is concerned due to progressively declining grades. Terry was in a bike accident in the third grade and was thrown from the bicycle, causing a separation of the cartilage from the rib cage. This very painful condition resulted in Terry missing several weeks of school and ultimately repeating the Grade 3 program. Terry was assessed 4 months ago and the psychological assessment revealed intellectual functioning to be in the average range (range 87–100), with academic functioning at a mid–Grade 3 level in all areas (standard score range 85–87). Terry did not qualify for special education assistance since the school district used the discrepancy criterion of 2.5 standard deviations difference between intellectual level and academic standard scores, which would require academic standard scores to be well below current levels. However, academic concerns have continued to escalate, and Terry is becoming more and more vocal about disliking school. There are frequent complaints of stomachaches, and there is often a refusal to eat lunch. In the past 5 months, Terry has been absent for 17 days and tardy on 16 occasions. The school is requesting further assessment to clarify the nature of the problems. During the follow-up assessment, Terry completed a number of self-report scales (depression, anxiety, personality), and scores indicate clinically significant elevations for all internalizing scales, including depression, anxiety, and somatization.

After reading the case of Terry Hogan, ask yourself the following question: Does Terry suffer from a significant mental illness? According to Shaffer and colleagues (1996), chances are approximately 1in 5 that Terry does. However, unlike children who have disruptive behavior disorders, Terry's symptoms are not readily apparent. How can the clinician determine the nature and severity of Terry's problems? What are the essential questions that need to be addressed?

Since a clinician's theoretical perspective can influence decisions, it is very important that clinicians are aware of their own theoretical biases in forming their opinions. Looking at a case through a set of theoretically colored lenses can affect all aspects of information processing, from hypothesis testing to treatment. The influence of theory on practice will become increasingly clear as case formulations are constructed from various theoretical viewpoints and applied to the case of Terry Hogan. The following exercise will provide a step-by-step look at how a case formulation would be developed and applied to this case.

Stage 1: Problem Identification: A Question of "What." At this stage, the clinician must ask the question, What is Terry's problem? However, this is often more complicated than it looks. For example, although Terry's poor academic progress was the initial concern, a very different set of problems eventually unfold that provided increased insight into the high rates of absenteeism and an increasingly negative attitude toward school.

Stage 2: Problem Interpretation/Understanding: A Question of "Why." At this stage of the process, the clinician draws on information from Terry's developmental and family history to provide a snapshot of Terry's history that can provide vital information regarding potential genetic factors that may suggest a vulnerability to some manifestations of behaviors (family pathology) or circumstances (family or school history), which might add to understanding how the problem evolved and what is maintaining the problematic behavior. At this point, it is also important to address any risks or protective factors that might help explain conditions that could exacerbate or moderate the problem. An understanding of the different theoretical perspectives can add to the depth and breadth of the analysis and hypothesis, and the ability to integrate information from these sources can contribute to our overall understanding and success in developing interventions based on the underlying dynamics involved.

Stage 3: Treatment Formulation: A Question of "How." Ultimately, our understanding of Terry's problem will help to inform treatment efforts regarding how to best address the problem based on our knowledge of evidence-based treatments that are most successful in dealing with problems of this nature. It will also be very important to integrate plans for monitoring and evaluating the effectiveness of the treatment plan in order to make any necessary changes.

CASE FORMULATION: APPLICATIONS TO THE CASE OF TERRY HOGAN

With the first goal of case formulation in mind, return to the initial description of Terry Hogan and reread the scenario with the following questions in mind:

1. What are Terry's main problems?
2. What is Terry's primary problem? Why has the problem developed (*precipitating factors*) and what is causing the problem to persist (*maintaining factors*)?
3. What other information is needed to respond to the above questions? Is Terry a boy or girl? Read the scenario again to see if you can find the answer. Risk factors for males and females can be different, so Terry's gender may also be a factor in determining targets for intervention.

Box C1.1 Thinking Out Loud

Although Terry is struggling academically, the initial assessment suggested that lack of academic progress was not due to lack of ability (intelligence was in the average range), but some other factor that was contributing to her lack of performance (production). Terry said that she disliked school. Could lack of performance be attributed to lack of motivation, interest, and effort?

Based on the information to date, pinpointing the problem is not an easy task. In order to understand the problem, it is necessary to delve into the information and focus on behavior

patterns that are most likely to yield relevant insights into Terry's difficulties. Based on the latest assessment results, the psychologist records the following impressions:

> During the follow-up assessment session, Terry seemed even more agitated than she had been previously. She appeared pale and had dark circles under her eyes. When asked about school, she said that things were worse than before (referring to 4 months ago). Her younger sister, Lilly, is now in the same grade and even though they are in different classrooms, her younger sister is a constant reminder of her failure. Terry said the family was living with her grandparents until last week. She said her grandfather gets "too angry" at her and yells a lot. Just before they moved out, her grandfather had taken the belt out to hit her and she ran out the front door and down the street. She said she didn't care if she was hit by a car, it was better than being hit by him. When asked about her absenteeism, Terry said that she felt sick a lot. She also mentioned that her back hurt, because she had been sleeping on a sofa bed that has a bar across the middle that digs into her back at night, and wakes her up, so she cannot sleep very well.
>
> Her mother is a waitress who works long hours some nights. Since they are no longer living with her grandparents, Terry and her sister now go to the restaurant to eat their dinner and then walk home with their mother when she is finished with work. She said that the restaurant can be noisy, so it is hard to do her homework. Terry's father is a truck driver and is often away. When asked about friends, Terry said she used to have some friends, but when she repeated the third grade, they wouldn't play with her anymore because she was only a third grader. Terry's favorite pastime is watching TV. She said that she liked to watch Disney movies because "they always have a happy ending, not like most things."

REASON FOR REFERRAL

Although the original reason for referral was academic concerns, it is becoming increasingly apparent that academic problems are more a symptom than a cause of Terry's difficulties. Further investigation is necessary in order to probe different hypotheses and provide an opportunity to develop case formulations from different theoretical perspectives. Information on family history, which would usually be obtained at the beginning of the case, is still lacking, since Terry's mother has not yet met with the school psychologist.

ASSESSMENT RESULTS

Terry's responses to the Revised Children's Manifest Anxiety Scale (RCMAS-2) indicated significant levels of Social Anxiety (feelings of isolation from peers and feelings of inadequacy compared to other girls her age). On the Child Depression Index (CDI-2), scores for Total Depression, Negative Mood, Ineffectiveness, and Anhedonia were all in the clinically significant range. There were indications of suicidal ideation, although Terry stated that she "would not do it." Although responses to the Personality Inventory for Youth (PIY) revealed a valid profile (nondefensive), there were also indications of a potentially exaggerated response profile. Responses indicated little pleasure derived from academics and school-based activities, high scores for distractibility and concentration problems, and tendencies to be irritable and impatient. Terry admitted to having problems with compliance issues and following the rules. She endorsed many somatic complaints often associated with anxiety and depression (frequent headaches, stomachaches, dizziness, fatigue), placing her score on the somatic scale in the clinically significant range. Terry's profile suggested that when psychologically distressed, she tended to show physical responses, such as feeling ill, loss of appetite, and sleep

disturbance. Responses to the family dysfunction scale revealed that she was unlikely to view her home as a source of satisfaction and instead saw home as conflicted and fragmented. Responses suggested a troubled relationship with her parents, who she describes as argumentative, frequently absent, and in disagreement with each other. Responses indicated that one or both of her parents might drink to excess or demonstrate other signs of less than stable emotional adjustment.

Terry's teacher completed the Behavioral Assessment System for Children (BASC-2), a rating scale of behavioral and emotional problems in children. Unfortunately, the parent version of the scale had not been returned to the school, despite several calls. Similar to Terry's responses, her teacher also confirmed clinically significant concerns on all internalizing scales, including Total Internalizing Problems, Depression, Anxiety, Somatization, Learning Problems, and Withdrawal (tendency to evade others and avoid social contact).

Based on the assessment results, the psychologist had a growing concern that Terry was experiencing many symptoms of depression, anxiety, and somatization. However, why these problems were occurring and seemingly escalating could only be speculated until there was contact with Terry's family. The school psychologist made several attempts to contact Mrs. Hogan.

Several weeks later, Mrs. Hogan agreed to meet with the school psychologist to discuss the assessment results. She provided a brief family history and answered most of the questions asked, although she was guarded in her responses. She explained that they had been living with her father for the past little while to ease financial burdens. She said he could be stubborn at times and blamed it on the Irish heritage. Her great-great-grandparents had emigrated from Northern Ireland at the time of the potato famine (mid-1800s) and worked as cheap labor in the United States, as did many who settled in America. She said that she'd kept the name *Hogan,* not taking her husband's name, because the name means "warrior" and she was a fighter. After these comments, she added, "I don't know why Terry does not live up to her name. She's a whiner and complainer; she's no warrior."

Shortly into the interview, Mrs. Hogan announced that the family was relocating to Tennessee at the end of the week to live with her sister's family, which would place them closer to her husband's new truck route. When the assessment results were discussed, Mrs. Hogan became very defensive and stated that Terry was pretty good at pulling the wool over people's eyes, implying that Terry had the psychologist "fooled." She said that living with Terry had been difficult since the day she was born. Terry was an irritable baby who never slept well and was always a fussy eater. She was a clingy baby who cried every time her mother left her, so it was hard to find sitters who would look after her. She said that Terry was a selfish child who only thought about herself. She wished that Terry could be more like her sister, Lilly, who was easy to get along with and had many friends. On the other hand, Terry was moody, irritable, and difficult to please; she often walked around with a "chip on her shoulder." Mrs. Hogan said that unfortunately, Terry took after her father, who was the same way, especially when he was drinking. When asked about family history for depression, Mrs. Hogan said she suspected that her husband might be "down in the dumps" sometimes, especially when he would start drinking. However, with the truck driving job, drinking was no longer an option. Mrs. Hogan admitted to having financial problems and blamed Terry's willful and disobedient attitude for getting them "booted out" of Terry's grandfather's place. She explained that her father (Terry's grandfather) had always had problems controlling his temper and that Terry would "mouth off" and cause him to lose his temper. She described Terry as a complainer who often said that she was not feeling well to get out of doing chores or helping around the house. As a result, her sister often had to carry twice the load.

The psychologist emphasized her concerns about Terry's emotional well-being and her symptoms of depression and recommended that Mrs. Hogan find a counselor for Terry when they arrived in Tennessee. However, Mrs. Hogan felt that would just encourage Terry to feel sorry for herself and make it worse. The psychologist requested permission to send the reports to Terry's new school, and Mrs. Hogan reluctantly agreed.

Box C1.2 Thinking Out Loud

Applying Theory to Case Formulations: The psychologist has now amassed information from several sources and can begin building hypotheses regarding Terry's internalizing problems (depression, anxiety, and somatization). The following case formulations will provide an increased understanding of how the problem can be conceptualized from a variety of theoretical perspectives.

CASE FORMULATION: 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/family systems.

Case Formulation Based on the Biological Perspective

Terry's family history may be positive for depression (father) and if so, then she would have an increased risk (20% to 45%) for developing depressive symptoms (Rutter, Silberg, O'Connor, & Simonoff, 1999). Imbalanced levels of serotonin, norepinephrine, and possibly dopamine and acetycholine have been associated with depression in adults (Thase, Jindal, & Howland, 2002). Abnormalities in the gene responsible for transporting the neurotransmitter serotonin (5-HTT gene) have been linked to increased risk for depressive disorder (Caspi et al., 2003; Hecimovic & Gilliam, 2006). Caspi and colleagues (2003) found that children who inherited the short allele of the serotonin transporter (5-HTT) were more likely to respond to stressful events with symptoms of depression and suicidal ideation than peers who did not inherit the short allele.

Cortisol is a hormone that is released by the hypothalamic-pituitary-adrenal system (HPA) in times of stress. High cortisol levels can result in heightened sensitivity to threat that have been linked to increased risk for depression (Pliszka, 2002).

Studies of the neurophysiology of emotion regulation are based on the need for positive resolution of fearful experiences to allow for the development of self-soothing behaviors in response to fear and anxiety (Siegel, 1999). Results of a recent 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. These results help explain Terry's feelings of physical pain in response to her emotional loss and rejection.

Therapeutic Implications. Although medical management is common in the treatment of depression in adults, approximately 30% to 40% of children with depression do not respond to medical treatment (Emslie et al., 1997). Fluoxetine (Prozac) is the only medication that has been approved by the FDA for use with children 8 years of age and older. Results of a 6-year-long investigation with adolescents found that combined treatment using antidepressants and cognitive–behavioral therapy was superior to cognitive–behavioral therapy alone (Apter, Kronenberg, & Brent, 2005). However, in 2006, the FDA issued a *black box warning* (the highest level of caution) for antidepression medications potentially increasing depression and suicidal behaviors in youth and young adults up to 25 years of age.

Box C1.2 Thinking Out Loud

Does the benefit outweigh the risk? Based on results of their exhaustive review of clinical pediatric trials between 1988 and 2006, Bridge and colleagues (2007) conclude that not taking prescription medication for depression places children at greater risk than taking the medications.

Case Formulation Based on the Behavioral Perspective

From a behavioral perspective, principles of operant conditioning can be very helpful in understanding how Terry's symptoms of depression, often manifested in claims of "not feeling well," have become ingrained in a repetitive pattern of avoidance behaviors. When Terry initially stated that she was "not feeling well," it is likely that responses included increased attention from those around her (*positive reinforcement*) and an opportunity to escape from doing chores (*negative reinforcement*). Either way, feeling sick was reinforced with a positive outcome, thereby increasing the likelihood for the behavior to be repeated in the future. *Positive reinforcement* involves the addition of a reward (e.g., when you feel sick, I will comfort you and nourish you), while *negative reinforcement* involves the removal of a negative situation. *Negative reinforcement,* not to be confused with punishment, is rewarding because it involves the removal of a negative (e.g., if you are sick, you do not have to do chores or go to school). Negative reinforcement has sometimes been called *escape* because it allows one to escape a negative consequence.

In the Introduction, coercion theory (Patterson, Capaldi, & Bank, 1991) was discussed as it relates to a social learning theory (a spin-off from the behavioral perspective). Coercion theory can help explain how Terry and her mother have established a negative cycle of interaction patterns. Parents who eventually yield to a child's escalating and demanding behaviors serve to *positively reinforce the child's misbehavior.* In this case, Terry's feeling sick has resulted in numerous absences from school, which allows her to escape from a situation she wants to avoid (*negative reinforcement*). In addition, as far as the communication pattern is concerned, when Terry is allowed to play the "sick role," the behavior is reinforcing for Terry (escapes going to school) and her mother (Terry stops whining and complaining). Therefore, the parent learns that giving in will stop the demands and whining (negative reinforcement), while the child learns that increased demands result in parent compliance (positive reinforcement). Since positive and negative reinforcement serve to strengthen behaviors, parent and child become locked in to an escalating and never-ending battle.

Therapeutic Implications. Based on behavioral analysis, the payoff for Terry feeling ill has been an ability to escape negative situations, such as doing chores around the house or having to attend school, where she is failing academically and socially. In developing a behavioral program, goals would be to increase her sense of academic and social competency at school in an attempt to reduce her need to escape from a negative situation. At home, reintroduction of chores should be done in a way that requires a sense of responsibility but is also inherently rewarding, for example, preparing dessert for the family. Terry and her sister should have a chore list that is negotiated between them in the presence of their parents, with a list of rewards (e.g., allowance, privileges) that can be earned and traded at the end of each week as compensation for completion of required tasks.

Through the use of behavioral tools such as knowledge of schedules of reinforcement and objective observation techniques, behavior intervention plans can be developed, monitored, and modified to assist with behavioral change. Rewarding obedience with attention and praise; issuing demands

that are clear and age appropriate; and providing consistent follow-through would strengthen Terry's compliant behaviors while increasing her self-confidence and breaking the cycle of avoidance behaviors. Building on earlier successes has proven to be a source of motivation in increasing compliance with more difficult tasks later on (Ducharme & Popynick, 1993).

Case Formulation Based on the Cognitive Perspective

Terry's cognitive framework for social interaction places her at risk for social rejection (Dodge, Bates, & Pettit, 1990). If Terry is overly sensitive to rejection, then she is likely to misinterpret ambivalent social situations as hostile and rejecting, or what has come to be known as the *hostile attribution bias.* Recently, Beauchaine, Strassberg, Kees, and Drabick (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. Mrs. Hogan's communication pattern with Terry is high on *expressed emotion,* a negative, critical, and disapproving interactive style. Such communication styles have been found to increase the risk for psychopathology in vulnerable family members (Nomura et al., 2005).

Therapeutic Implications. Cognitive–behavioral therapy (CBT) seeks to facilitate positive integration of thoughts and behaviors. For Terry, CBT would focus on how Terry's faulty belief system contributes to feelings of negative self-worth and avoidant behaviors. Social cognitive treatment might involve role-play in areas of social cue awareness and the underlying processes that contribute to the development of prosocial behavior, such as secure attachment, social perspective taking, empathy, and self-control. Parent training using CBT methods would focus on negative attributions, emotion regulation, and, ultimately, on increasing effective strategies for more positive communication. One possible program to enhance communication between Terry and her mother is the Seattle Program, which was developed by Speltz and colleagues (Greenberg & Speltz, 1988; Speltz, 1990). This parent training program uses cognitive–behavioral methods to assist families of children with insecure attachment which is discussed next. 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.

Case Formulation Based on Psychodynamic and Attachment Perspectives

On a psychodynamic level, Terry's internalizing problems would be represented as the internal manifestations of unconscious conflicts stemming from an imbalance in the underlying personality structure. In Terry's case, her mother's rejection could represent a symbolic loss resulting in feelings of depression and feelings of guilt and self-blame for driving her mother away. Freud would interpret the loss within the context of unmet needs (lack of parental nourishing) during the oral stage. This pervasive sense of loss can result in feelings of emptiness and withdrawal from social contact, which can increase symptoms of depression. Individuals may remain overly dependent on others, feel unworthy of love, and have low self-esteem (Busch, Rudden, & Shapiro, 2004). In addition, Terry's somatic complaints may be interpreted as tendencies to translate psychic pain into physical pain.

Ego psychologists might suggest that Terry's insecurities result from a lack of resolution of the rapprochement phase in the separation individuation process. In this phase, the toddler is

faced with awareness of separation, separation anxiety, and conflicting desires to stay close to the mother. Normally, the process of gaining greater independence and self-identity is facilitated by the parent, who performs the dual role of remaining emotionally available while gently encouraging the push toward greater independence (Settlage, 1977). However, as Terry's mother was not emotionally available for her, theory would predict that conflicts between autonomy and dependence would be repeated throughout development, especially in vulnerable times (Kramer & Akhtar, 1989). Successful resolution of the conflict at this stage is achieved through the development of an internal representation or model of the parent–child relationship that can sustain separation due to the securely developed ego. To ego theorists, the focus is on consolidation of the ego, while for attachment theorists, the focus is on the relationship (Fonagy, 1999).

From an attachment perspective, the degree of security/insecurity inherent in primary attachment relationships provides *internal working models (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. Terry's avoidant behaviors may be the result of internal working models (IWMs) based on an early *avoidant attachment pattern.* It is likely that Terry's mother was, at times, withdrawn and emotionally unavailable, and at other times harsh, emotionally charged, and highly punitive (negative and highly critical). Within this context, Terry's avoidance behaviors may serve to manipulate and regulate caregiver proximity and attentiveness. Through the use of avoidant techniques, Terry can shield her sensitivity to her mother's harsh and rejecting responses. It has been suggested that these maladaptive behaviors may fit with the overall schema of family dysfunction (Marvin & Stewart, 1990). Terry's IWM is likely to evolve around avoidance and withdrawal to shield her from fears of rejection. Within this framework, 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).

Insecure attachments can develop for a variety of reasons, including child characteristics (e.g., difficult temperament) and characteristics in the immediate environment, such as parenting style (Belsky, 1999). In Terry's case, there is strong evidence to suggest that both factors are highly interrelated. Greenberg, Speltz, DeKlyen, and Endriga (1993) incorporate four factors in their risk model for behavioral disorders, all of which are evident in the case study of Terry: *insecure attachment, atypical child characteristics, ineffective parenting,* and *family environment.* Although quality of attachment can be seen as a risk or protective factor in its own right, living in an environment that contains multiple risk factors (low SES, family stress, parent maladjustment, etc.) also increases the likelihood of developing an insecure attachment (Belsky, 1997).

Socially, maladaptive attachment patterns can also undermine social orientation and subsequent prosocial competencies. Terry's lack of social reciprocity and withdrawal from social contact preclude strong social motivation at this point in her life. For Terry, the social world is a hostile territory that she would rather escape from than attempt to cope with. On the other hand, there is evidence that children with early secure attachments are more socially oriented and compliant and have better developed abilities to regulate their emotions (Ainsworth et al., 1978; Greenberg, 1999).

Therapeutic Implications. Depending on the therapist's psychodynamic orientation, the therapeutic process might focus on the individual child (working through internal conflicts in play therapy), the parent (helping a parent resolve his or her own childhood conflicts and traumas), or the parent–child dyad (conjoint play therapy). In Terry's case, all three approaches would be appropriate—initially engaging Terry and her mother in individual therapy sessions and ultimately bringing them together in conjoint play therapy sessions. Psychodynamic developmental therapy for children (PDTC) is a relatively recent advancement in psychodynamic therapy

developed by Fonagy and Target (1996). Although the approach is psychodynamic in origin, principles of social information processing (social cognition) are used to assist children in linking thoughts to feelings and behaviors (*reflective processes*). A PDTC therapist might provide *corrective experiences* through play therapy and the use of metaphor to assist Terry in replacing self-damaging feelings with increased positive views.

Box C1.3 Thinking Out Loud

Secure attachments can lead to better understanding rather than avoidance of negative emotions (Laible & Thompson, 1998). Terry demonstrates very few coping skills to effectively deal with negative emotions or negative information. Thompson (1999) suggests that "lessons learned" in attachment relationships may be instrumental in defining expectations in such areas as how others react when the child is experiencing difficulties coping with stress, anxiety, or fears.

Case Formulation Based on Parenting Style and Family Systems Perspectives

The *authoritarian parenting style* is a controlling and harsh style of interacting that is lacking in warmth and often predictive of *avoidant attachment patterns* (Rubin, Hymel, Mills, & Rose-Krasnor, 1991). Baumrind (1991) found four different parenting styles, based on the amount of structure and warmth parents provided. The *authoritative parenting* approach (high structure and high warmth) has been associated with the best child outcomes. Children raised in a household that uses authoritarian parenting practices may demonstrate aggressive and uncooperative characteristics, while those whose parents are *uninvolved* or *permissive* may respond with more negative traits due to the lack of structure. Based on an avoidant attachment pattern and authoritarian parenting practices, Terry may have developed her tendency to feel overwhelmed by any emotional demands placed on her, or feel unable to cope with challenges in her environment, and respond by withdrawing and avoiding uncomfortable situations.

Family systems theory represents a variety of approaches that are unique to the traditional psychological focus on individual differences. Family systems theory, instead, looks at the family unit at the primary source for assessment and intervention. Within Terry's family constellation, we see that Terry's mother has aligned with Lilly (the good daughter) and has used this system of triangulation to shift the balance of power toward her and against Terry. The family also tends to have a combination of very loose boundaries (mother shares too many intimate details with Terry) but rigid boundaries regarding how much Terry can share with the family. Terry has also been flagged as the "problem child," a stereotype that allows Terry's mother to *detour* her focus (Terry is the problem, rather than to acknowledge other problematic issues in the family, such as marital conflict, father absenteeism, and financial concerns).

Treatment Implications. Beauchaine, Strassberg, Kees, and Drabick (2002) found that parents who used ineffective and harsh methods of discipline associated with the authoritarian parenting style often had children who demonstrated poor relationship skills and did not have a good ability to generate alternative solutions to problems. Parents and children were especially deficient in providing solutions to issues of noncompliance, especially when required to resolve these issues under pressured conditions. Beauchaine and colleagues (2002) suggest the need for treatment plans to target the underlying processes of negative attribution bias and poor affect regulation, pivotal factors that drive coercive parenting patterns.

Within the family systems approach, the therapist would attempt to observe family interactional patterns as they emerge in the family situation. The goal would be to restructure the family interactions toward more positive growth and change. In Terry's case, the therapist would likely focus on repositioning the balance of power and on improved problem solving and communication between family members. As far as communication style, the main style of communication in this household best fits a description of *expressed emotion* (EE), a communication style that is hostile, critical, and prone to emotional overinvolvement (EOI). Families with communication styles high in EE attributes tend to be more rigid, have more intense and negative verbal exchanges that are often conflicted and oppositional in tone, and have been associated with relapse of psychiatric symptoms in individuals who are vulnerable to stress. As such, communication styles that are high in EE attributes are often considered within a *diathesis-stress model,* as an environmental stressor that can exacerbate or precipitate mental distress in individuals with a given genetic vulnerability (Hahlweg et al., 1989; Hooley & Hiller, 2000; Wuerker, Haas, & Bellack, 2001).

INTEGRATING THEORETICAL PERSPECTIVES: A TRANSACTIONAL ECOLOGICAL BIO-PSYCHO-SOCIAL FRAMEWORK

The Case of Terry Hogan: A Brief Summation

Our case formulations for Terry Hogan have provided increased awareness of how different theoretical perspectives can contribute to an overall understanding of the nature and seriousness of her depressive symptoms. For Terry, risk factors evident on several levels of Bronfenbrenner's model (Bronfenbrenner & Morris, 1998) have added to the severity of her problems. At the individual level, Terry's difficult temperament was a poor fit for her mother's impatient, inherently negative, and hostile approach to parenting (authoritarian parenting style). At a biological level, it is possible that Terry inherited a genetic vulnerability to depression. Terry's poor relationship with her mother and isolation from her peers have added to her feelings of being ineffectual, culminating in a sense of learned helplessness. Her tendencies to use withdrawal and avoidance, likely patterned after an avoidant attachment relationship, have successfully allowed her to escape from situations of discomfort (school and chores) by claiming to be feeling ill, which has resulted in these patterns being negatively reinforced, thereby increasing and strengthening this avoidant behavior pattern. Risks in the immediate environment, *microsystem* (home and school), *exosystem* (financial stress), and the overall cumulative effect of her experiences, *chronosystem,* suggest that Terry is in serious need of intervention. Her mother has focused on Terry as the "problem child," allowing her to ignore major problems in the marital relationship. In addition to these underlying dynamics, Terry is at increased risk for major depression and possibly a suicide attempt because of the presence of a multitude of risk factors. It is unknown whether her recent move to Tennessee will provide a more stable environment with increased support from her aunt's family or begin a spiral that leads to increased symptoms of depression and increased risk for suicide.

POST-CASE QUESTIONS

At the end of every case, you will find a series of post-case questions that are intended to assist you in consolidating the information from the case with information provided in the Introduction to Chapter 1, Appendices, and any outside readings that may be suggested.

1. Terry's family seems to have a history of depression. From a biological perspective, what are the potential dynamics that might be involved in inheriting the risk for depressive symptoms? What are some of the positive and negative issues and implications regarding medical management of depression symptoms for Terry, based on the research findings regarding children her age, and given the family dynamics?
2. Terry's lack of compliance may be explained from a behavioral perspective by using the ABC paradigm (antecedent, behavior, consequence). How would coercion theory explain the dynamic of escalating aversive responses between Terry and her mother? Develop a behavioral intervention plan to assist Terry and her mother with her noncompliant behaviors.
3. Terry and her mother often engage in communication that is high in "expressed emotion." From a cognitive perspective, this communication style has been associated with a number of negative outcomes. Explain how this dynamic works and apply this to exchanges between Terry and her mother. What suggestions would you have for improving the interactions?
4. Explain how Terry's attachment history and attachment pattern can be used to better understand the underlying dynamics in this case. Be sure to include information on attachment from the Introduction to Chapter 1, regarding the ecological-developmental framework (Greenberg, 1999) and Strathearn's (2011) work on neurobiological factors influencing maternal responsiveness.
5. The authoritarian parenting style can often result in an avoidant attachment pattern. Explain how this applies to Terry's case. Beauchaine and colleagues (2002) suggest the need for treatment plans to target the underlying processes of negative attribution bias and poor affect regulation that may develop from harsh parenting styles. How would you address these issues therapeutically in Terry's case and what do you see as your biggest challenges to being successful?
6. Using Brofenbrenner's ecological transactional model as a framework, discuss the risks and protective factors that exist for Terry given the dynamics in her case.
7. Suggested Individual or Group Presentation Activity: The principal has called a parent–school meeting to discuss concerns about Terry's progress and her future. Assign roles to individuals who will role play important individuals in Terry's life and how they would interact in this situation. Develop important questions for each of the players who can add information to the case. Some of the casting members might be Terry, Terry's mother, Terry's father, Terry's grandfather, Terry's teacher, the psychologist, and any other individual that you feel might contribute to an understanding of the case and assist with developing an overall case formulation and treatment plan.

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CASE 2

Jeremy Jones

Mommy and Me and Grandma Makes Three: Developing an Intervention Plan

Jeremy is a 6-year-old Caucasian boy who came to the clinic accompanied by his mother, Debbie, and his maternal grandmother, Blanche. Jeremy was referred for assessment by his pediatrician. Despite trials of numerous medications and doses, Jeremy has continued to demonstrate problem behaviors that are hyperactive, impulsive, and noncompliant. Jeremy currently takes Adderall twice daily (morning and noon) and risperidone (Risperdal) three times daily (morning, noon, and evening). Jeremy has been taking Adderall for 2 years and risperidone for the past year. Although Jeremy appears to be a very bright boy, he is currently repeating the kindergarten program, since he was considered "too immature" to progress to Grade 1.

DEVELOPMENTAL HISTORY/FAMILY BACKGROUND

Jeremy's mother provided the following background information. Jeremy weighed 7 pounds 6 ounces at birth. Although the pregnancy, labor, and delivery were all normal, Jeremy was severely jaundiced at birth. As a result, he remained hospitalized for 5 days while he was placed under special lights called bili lights to alleviate the jaundice. Neonatal jaundice was the result of G6PD deficiency (an inherited human enzyme deficiency), a condition that causes an allergic reaction to fava beans, which can induce a severe anemic response. A similar response could develop if Jeremy developed viral hepatitis or pneumonia. He is monitored by his pediatrician, and all medication trials have been closely supervised. Jeremy has had no adverse reactions to the Adderall or the risperidone.

Jeremy's milestones were advanced: walking at 8 months and speaking in simple phrases at 7 months. However, Jeremy continues to exhibit articulation problems, which his mother attributes to constant bouts of recurring ear infections. Mother and grandmother reported that by 2½ years of age, Jeremy was using words such as *humiliation* and *victimization* in his conversation and would have long conversations about experiments he was conducting in his "laboratory." Currently, Jeremy is receiving assistance for articulation from the speech pathologist at the school.

Shortly after his second birthday, Jeremy began to say "No" to everything, and power struggles have been ongoing ever since. According to grandmother, "Jeremy is as stubborn as a mule!" However, as much as Jeremy will say "No" or "I amn't gonna' do it," he will not take no for an

answer. Jeremy coined the word *amn't* as a short version of "am not" when he was about 2 years of age, and his mother and grandmother continue to find it very amusing and repeatedly taunt him with it, saying they "amn't gonna' do it either." Apparently, Jeremy will argue about anything and everything and will "throw a fit" if he does not get his way. Although he likes to be challenged by doing difficult tasks (multipiece puzzles), he is very quickly frustrated and easily upset when he can't solve something. His mother believes Jeremy's stubbornness and strong desire to be first have caused problems at school, since Jeremy will push others out of the way in order to be first, and many of the other children avoid him. Reportedly, Jeremy loves to go to school, but adjusting to formal school routines and expectations has been difficult for him. His impulsive and willful behaviors get him into trouble, and his tendencies to carry boisterous and loud activities from the schoolyard into the classroom are disruptive. Jeremy was retained in kindergarten due to issues of immaturity, problems relating to peers, and lack of productivity regarding academic schoolwork. His teacher was unable to estimate Jeremy's current levels of functioning due to issues of noncompliance and failure to complete assigned work.

Jeremy was described as a very active and curious toddler. He was generally a good sleeper (mother said that he just wore himself out) and had a good appetite. When asked about any health issues, mother stated that Jeremy has been in good health. He has not had an ear infection in the past 2 years. He is vulnerable to skin rashes and seasonal allergies. They believe that Jeremy inherited both of these conditions from his grandmother, who has significant bouts of psoriasis and allergies to pollens and grasses. During the interviews, Grandma's psoriasis was very noticeable, as patches covered her exposed arms.

According to his mother, Jeremy has always had his "good days and bad days." He can be fun and playful, but then again, he can be very difficult and demanding. There were some difficulties with potty training and once again, his caregivers suggested this might be due to Jeremy's stubborn nature. Grandmother was quite proud of the fact that her potty training methods made the difference in Jeremy finally becoming trained. Grandmother said that eventually he was trained by 3 years of age; however, she attributes successful training to monetary rewards. At one point, grandmother was rewarding successful potty episodes at $5.00 each.

There is a history of mental instability in the maternal family. Jeremy's mother and grandmother are currently on medication for depression (Prozac), and Jeremy's mother, Debbie, said that she has suffered from episodes of depression "on and off" for years. She did not do well in school and also wonders whether she has a learning disability or attentional problems. Mother is 25 years of age, is unemployed, and is currently taking one course at the local college. Grandmother is 55 years of age and is on a small disability pension. Grandmother reports that she is a highly anxious individual, as well as depressed, and "worries" about most things. Blanche said that most people in the family have "some mental problem or another" and added that her sister (Jeremy's great aunt) will not leave the house (agoraphobic?) and has panic attacks. Apparently, the maternal grandfather is an alcoholic and is also subject to violent outbursts and depression (bipolar?); his inability to tolerate medication made him "impossible to live with." Shortly after Jeremy's birth, Blanche moved in with her daughter and Jeremy to help with child rearing, since Debbie suffered an episode of postpartum depression lasting about 3 months. During this period, Debbie spent much of her time in bed sleeping, while Blanche cared for Jeremy. She said that she was "very anxious," since she had not cared for a baby in 20 years and was fearful that she might do something wrong. Debbie reported that Jeremy's birth father told her he was "clinically classified as insane" and that he often engaged in reckless, dangerous behaviors and had been in trouble with the law. Jeremy has had no contact with his birth father or grandfather since his birth.

Debbie was in a car wreck 9 months ago, when her car was sideswiped by a truck. Although she was not hospitalized, she did sustain major bruising and continues to receive chiropractic treatment twice a week. Apparently, a teacher at Jeremy's school showed Jeremy a picture of

the car, which had appeared in the newspaper, and Jeremy was so upset that he did not want to separate from his mother to go to school for the next 6 weeks. This has been a very difficult time for the family because of the stress of the accident and Jeremy's behaviors. School attendance has been sporadic, since some days, Blanche doesn't have the energy to "drag" Jeremy to school while Debbie is recuperating from her injuries.

REASON FOR REFERRAL

When asked the primary reason for having Jeremy assessed, the caregivers' immediate response was that the pediatrician had recommended it. When pressed further, both stated that they were very interested in knowing what Jeremy's IQ was. There was no mention of possibly finding a solution to managing his behavior problems.

ASSESSMENT RESULTS

Descriptions of the test instruments used in this assessment and guidelines for interpretation of standard scores and T scores are available in Appendix C.

Jeremy literally exploded into the clinician's office, abruptly letting go of his mother's hand and immediately trying to pry open the test kit on the table. The psychologist was able to halt further efforts to dismantle the test kit with a firm, "Not yet, Jeremy," while providing drawing paper and markers for his immediate attention. Despite his whirlwind arrival, his mother confirmed that Jeremy had taken his medication prior to coming. Mother left immediately after introducing Jeremy to the psychologist, and Jeremy evidenced no noticeable reaction to being left with a stranger or to his mother's departure. Although the psychologist attempted to engage Jeremy in conversation, his poor articulation skills made conversation difficult.

Jeremy was far more interested in getting to the test materials, which were undoubtedly the "good stuff" of the assessment for him. Test behaviors and learning style revealed a youngster who was highly active and very fidgety and restless throughout the assessment sessions. Although he was responsive, he did have some difficulty staying on task when required and in complying with specific requests. Jeremy had trouble remaining seated and took turns sitting, standing, kneeling, rocking, and walking around the room. Attention span and compliance with task demands varied considerably across tasks. Tasks requiring manipulation of materials and hands-on activity were met with far more enthusiasm and focus than verbal tasks. He responded poorly, if at all, to questions that required oral responses and provided minimal visual input. During the vocabulary test, rather than provide oral answers in response to word definitions, Jeremy delighted in giving clues to the psychologist in visual form in a game-playing type of format. When asked to spell the word *cat* on the test protocol, Jeremy jumped out of his chair and drew a large picture of a cat on the blackboard. When asked to describe what a "clock" was, Jeremy made an arrow on the blackboard in the room pointing to the clock above it. When asked for a definition for the word *hat,* Jeremy again ran to the blackboard and added a hat to his drawing of the cat.

On tasks that were maximally engaging (blocks, puzzles, working with pictures), it was often necessary to curb Jeremy's enthusiasm. On these tasks, Jeremy often attempted to grab test materials before they were introduced and ignored instructions to wait until materials were presented. Jeremy was very intent on pursuing his own agenda, and there were frequent compliance issues. Redirection to task was frequently required throughout the assessment. There were two 35-minute assessment sessions, one week apart. At the completion of the first session, Jeremy heard the elevator and immediately ran out of the room and down the hall toward the top of a long staircase.

The psychologist was concerned about safety since Jeremy could easily have fallen down the stairs. Mother and grandmother took the opportunity to scold Jeremy for his behavior and, as punishment, canceled plans to stop at a restaurant on the way home.

When engaged in a task he enjoyed doing, Jeremy was able to attend to the stimulus materials adequately and problem solve without impulsive responding. He did evidence frustration on occasion, when he was unable to obtain an adequate solution, and appeared fatigued after working unsuccessfully on a block design for 1½ minutes. However, he was able to regroup and was more successful on the next two designs attempted. His speech evidenced many sound substitution errors ("wabbit" for "rabbit" and "ewebwoddy" for "everybody") and cluttering of words resulting in indistinct utterances. However, Jeremy readily repeated phrases when asked for clarification.

Responses to the Wechsler Intelligence Test for Children (WISC-V) revealed that Jeremy's Verbal Comprehension Index (VCI) was within the average to high average range at approximately the 66th percentile (VCI range 99–112). Jeremy's scores for Visual Spatial Index (VSI) and Fluid Reasoning Index (FRI) were both within the Very High Range (VSI range 121–137; FRI range 118–135). His overall score for nonverbal learning (Nonverbal Learning Index, NVI, range 123–135) was significantly higher than his VCI. Given the significant discrepancy between scores in the verbal and visual areas, the full scale IQ was not calculated, since it would merely represent the numerical average of three very discrepant scores (Kaufman & Lichtenberger, 2000). Caution should be used in interpretation of the VCI score as a valid indicator of Jeremy's verbal skills, since his motivation and cooperation were questionable during the administration of the verbal items. Given Jeremy's attention span and interest level, it was not possible to administer tasks for the Working Memory Index (WMI), including digit recall and number–letter sequence. He did, however, complete the coding and symbol search tasks of the Processing Speed Index (PSI) well above average (scale score of 16 for the coding test and scale score of 13 for symbol search). Scores for visual reasoning were more consistent and revealed very strong performance overall. Relative strengths were noted in figure weights, visual puzzles, matrix reasoning, and block designs, all of which were at the 98th percentile. Academically, Jeremy's responses to the Wechsler Individual Achievement Test (WIAT-III) revealed inconclusive information, since Jeremy completed only those questions he wanted to try. When asked to draw a boy, Jeremy stated that he would draw a man instead. The drawing was very immature in areas of line juncture and body proportion. Jeremy participated in providing responses to the Joseph Pre-School and Primary Self-Concept Screening Test. Jeremy's responses indicated that his Global Self-Esteem was within the high positive range.

During the clinical intake interview, Jeremy's mother completed several checklists derived from criteria outlined in the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-5;* APA, 2013). Mother endorsed the following items from the ADHD scale as occurring often or always: *fidgets with hands or feet (squirmy); has problems awaiting his turn; problems playing quietly; problems sustaining attention in tasks; does not listen; problems organizing tasks; problems remaining seated; easily distracted; forgetful; loses necessary items; runs about and climbs incessantly; often on the go, driven; blurts out answers before questions are asked;* and *avoids tasks that require sustained mental effort.* On informal scales for problem behaviors, Jeremy's mother noted that he was very often "noncompliant" and "defiant" and that he could, at times, be very difficult to deal with. Particular behaviors that occurred frequently included *loss of temper; blames others for his mistakes; argues with adults; touchy, easily annoyed;* and *actively defies or refuses to comply with adult requests.*

In addition to informal diagnostic scales, Jeremy's mother also completed the Conners Parent Rating Scale (Conners 3) and the Child Behavior Checklist (CBCL). According to ratings on the Conners and CBCL, Jeremy demonstrated clinically significant symptoms of attention-deficit/hyperactivity disorder, predominantly the impulsive/hyperactive presentation. In addition, oppositional defiant behaviors and perfectionistic tendencies were also in the clinical

range. There were indications that Jeremy complains of physical symptoms more than the average child and that he can be prone to anxiety. Symptoms of distractibility and tendencies to perseverate on ideas were evident on the CBCL. As part of the intake information, mother also completed the Parenting Stress Index (PSI; Abidin, 1995) where she rated Jeremy at or above the 99th percentile for distractibility/hyperactivity, inability to adjust to changes in environment, and demandingness. Elevations on these scales are typical for parents of children with ADHD, with demandingness often the peak scale (Abidin, 1995). With respect to family stresses, mother endorsed only concerns about her health as a significant stressor. Grandmother declined to complete any forms, saying that "Debbie is the mother."

Jeremy's teacher completed the Conners 3 Teacher Rating Scale and the Teacher Report Form (TRF: Achenbach). Although the teacher ratings were less elevated than Jeremy's mother's ratings in all areas, his teacher also noted some concerns regarding perfectionistic tendencies. According to the TRF, hyperactive-impulsive behaviors were at the 95th percentile, indicating significant difficulties in this area. In addition, thought problems were also noted.

Based on assessment results, intake information, and clinical observations, the psychologist produced the following preliminary summary and diagnostic impression:

Summary of Jeremy's Formal Assessment

Jeremy is a 6-year-old boy who is currently repeating kindergarten at J. J. B. Elementary School. Jeremy is a bright and engaging child; however, he is experiencing difficulties at home and at school as a result of hyperactive and impulsive behaviors and tendencies to be noncompliant in situations when he is not in control and when he is expected to follow directions that may or may not be to his liking.

Although Jeremy scored in the superior range on tasks of visual reasoning, his scores on verbal reasoning tasks were less impressive due to several factors, including Jeremy's lack of interest and motivation to respond to verbal tasks. It is suspected that his weaker performance on verbal tasks reflects his lack of task engagement rather than his learning potential. Despite his excellent reasoning ability, Jeremy may continue to experience difficulties due to poor ability to regulate activity levels relative to task demands; Jeremy was either *understimulated* (task was not interesting to him), or *overstimulated* (task was very exciting). In the former case, Jeremy revealed poor attention span and distractibility, whereas in the latter case, he showed poor restraint and impulsivity. Problems with compliance were also noted throughout, suggesting that Jeremy has developed a strong repertoire of manipulative strategies that may be more resistant to correction than if he were not so high functioning. Another way in which his superior intelligence may be a risk factor is that Jeremy's lack of success academically may be even more frustrating for him. The significant discrepancy between VCI and NVI may also indicate a specific learning disability, which might complicate academic progress. Certainly at this point, Jeremy's academic skill levels are virtually nonexistent. Whether academic difficulties result from a specific learning disability or an inability to apply himself to the task at hand remains to be seen.

Mother and grandmother jointly completed the Home Situations Questionnaire (Barkley, 1997) to provide increased understanding of the nature of Jeremy's noncompliant behaviors and how they were being managed within the home. The Home Situations Questionnaire classifies compliance problems in three areas within the home: instructions, commands, and rules. Results revealed four primary problematic situations: when adults are talking on the telephone, when adults are watching television, when Jeremy is asked to do chores (cleaning the room), and when Jeremy is asked to do homework. Problem areas were discussed at length, and the caregivers engaged in role-play to demonstrate how each would interact with Jeremy under problem conditions. Based on the dialogue and role-play, two areas of compliance difficulty were targeted for further investigation.

The caregivers selected problems with chores (specifically, when Jeremy is asked to clean up his room or pick up his toys) and talking on the telephone (Jeremy's intrusiveness when mother or grandmother is occupied) as the two problem areas of most concern.

1. Compliance with requests to clean his room: Mom and grandmother agreed that when asked to clean his room, Jeremy typically engages in argumentative behaviors (why he shouldn't have to do it), delay tactics (says he will do it later), manipulations (asks for help), or refusals (says he can't or won't do it). There was also agreement about the methods used by each parent, saying that each had figured out the "good cop, bad cop" routine wasn't working, nor was mother's response to count to three. Jeremy had pretty well figured out that most times there wasn't going to be anything happening after the three count, so this was not very effective. Mom's response to Jeremy not cleaning his room usually involved yelling and screaming. She proudly described a recent situation in which Jeremy yelled back at her "as loud as possible," but mother retaliated even more loudly, just to show him that she could out-scream him. He tried but he couldn't do it; as a result, mother said he had learned the lesson that she screams the loudest. While mother screams, grandmother basically gives in and cleans the room for him to avoid any further problems. A functional behavioral assessment and behavioral intervention plan to increase compliant behaviors will be discussed as a treatment alternative later in the chapter.
2. Interruptions while trying to talk on the telephone: Specifically, "Jeremy will stand in your face and talk at you, so you can't hear the person on the telephone; he won't wait until the call is finished." Mother's typical response is to take the phone outside (if the weather is nice) or to yell at Jeremy. Grandmother reports getting very upset with him and hanging up the phone as a result.

ISSUES, TRENDS, AND TREATMENT ALTERNATIVES

Developing a Case Formulation from Several Perspectives

Biological Perspective

Jeremy has a long history of family psychopathology (Cicchetti & Toth, 1998), including attention problems (mother and possibly father); mood disorders (mother, maternal grandmother, possibly maternal grandfather); anxiety disorders (grandmother, potentially maternal aunt); substance abuse (maternal grandfather); and antisocial personality disorder (father). Studies reveal that 50% of parents with ADHD have a child who is also ADHD (Biederman et al., 1995). Genetic transmission for depression is estimated to be between 20% and 45% (Rutter, Silberg, O'Connor, & Simonoff, 1999), with almost half developing bipolar disorder; odds for bipolar increase if there is a family history for the disorder (Geller et al., 2002). General anxiety disorder, panic attacks, or obsessive thoughts and behaviors result from malfunctions of GABA (gamma-aminobutyric acid), which normally inhibits arousal, resulting in heightened levels of stimulation (Lloyd, Fletcher, & Minuchin, 1992). Heritability of GABA malfunction can be as high as 30% to 40% (Eley, 1999). If antisocial personality disorder is present in the immediate family, there is an increased risk for aggressive and disruptive behavior disorders (*DSM-IV-TR;* APA, 2000). Studies have found that individuals with disorders of impulse control, such as antisocial personality disorder, react to stressful circumstances in a dysregulated and destructive manner, often directing their destructive actions toward violation of the rights of others. In these cases, individuals who inherit the short allele

(5HTT) of the serotonin neurotransmitter react with heightened activation of the amygdale and cortical systems (Barr et al., 2003; Hariri et al., 2002). During these stressful episodes, aggressive behaviors (destructive impulses toward others) become more probable (Stanley, Molcho, & Stanley, 2000). Lyons-Ruth and colleagues (2007) found that the short form of the 5HTT was linked to an increased risk for antisocial symptoms; individuals who had inherited the short form of the serotonin transporter allele were twice as likely to express impulse disorder symptoms, whereas those who inherited two of the short alleles were at four times the risk of developing impulse disorders.

Child temperament can be another biological marker influencing a child's response to his or her environment. Rydell, Berlin, and Bohlin (2001) studied children who were high on *emotionality* (intensity of emotional arousal) and low on *social adaptation* (respond to emotionally charged situations in either a flight [withdrawal and avoidance] or fight [anger and aggression] pattern). They found that children with this combination were poorly equipped to manage their emotional responses to environmental demands. Although previous research has demonstrated that maladaptive responses occur under highly negative conditions (e.g., internalizing children would withdraw and avoid social contact, while externalizing children would aggress and break rules), Rydell, Berlin, and Bohlin (2001) found that children with externalizing problems escalated out of control in highly positively charged situations as well (e.g., the child cannot manage negative or positive emotions).

Although above-average intelligence is usually thought of as a protective factor (Luthar & Zigler, 1992), in Jeremy's case, superior intelligence may place him at greater risk for maladaptive behaviors, if he uses his intellectual capacity to "outwit and outsmart" his caregivers by developing manipulative strategies and engaging them in power struggles.

Environmental factors can interact with biological traits and vulnerabilities in a way that exacerbates existing conditions. Barkley (1997) suggests a four-factor model to explain factors that can maintain and increase noncompliant behavior. According to this model, predisposing characteristics are

1. The temperament of the child (temperamental, high emotional reactivity, impulsive, active, inattentive)
2. The temperament of the parents (immature, temperamental, impulsive)
3. Child management patterns (inconsistent, harsh, indiscriminate, and coercive parenting, poor monitoring of child activities)
4. Distressed family environment (financial, health, and personal stressors)

The model is well-suited as a framework for developing case formulations that can integrate information across theoretical models.

Disruptive behaviors can be enduring, with patterns of persistent oppositional and aggressive behaviors beginning in the preschool years and persisting across development (Owens & Shaw, 2003). Jeremy has several risk factors for the development of disruptive behavior patterns. Historically, Jeremy's temperament has been problematic in areas of adaptation to change and emotional reactivity, resulting in difficulties with emotion regulation (Bridges & Grolnick, 1995). When we place this temperament pattern within the context of the underlying dynamics inherent in this mother–grandmother-parented family that often seems to shift roles as to who is the parent and who is the child, the problems increase in intensity. Other environmental risk factors for disruptive behavior disorders include insecure attachment (Rutter, 1995; Sroufe, 1997), cycles of maternal depression and rejection (postpartum depression), child aggression and impulsivity (Owens & Shaw, 2003), poor school adjustment, and lack of positive peer

relationships (Blum et al., 2000). Maternal depression with features of irritability, criticism, and lack of positive affect can also increase the risk of disruptive behaviors in children (Aguilar, Sroufe, Egeland, & Carlson, 2000).

Parenting, Attachment, and Family Systems Perspective

Insecure attachment may pave the way for Jeremy to develop separation anxiety in response to his mother's recent car accident, resulting in excessive need for proximity and heightened fears of possible loss. When placed in fearful situations, being soothed by the parent can assist the infant in building brain structures that can help regulate responses to fearful situations in the future. However, in dysfunctional attachment relationships, caregivers do not provide assistance in the regulation of emotions, such as fear, and actually can become a fear-provoking agent. In these circumstances, infants do not learn how to self-soothe in stress-producing situations. Lyons-Ruth and colleagues (2007) found that early child care problems resulted in negative outcomes several years later. As a result, Lyons-Ruth (2008) suggests that "disruptions in early mother–infant communication are clearly important to long-term prediction of some forms of psychopathology" (p. 209). Since early attachment patterns provide the schema for later relationships, Lyons-Ruth goes on to suggest that contradictory cues may disable an individual's ability to develop an appropriate working model for relationships. Pertinent to Jeremy's case, research has also found transgenerational effects that explain how the controlling pattern of hostile, punitive, or rejecting behaviors of mothers with insecurely attached boys with oppositional defiant disorder mimic their own backgrounds of insecure attachment patterns (DeKlyen, Speltz, & Greenberg, 1996). Disruptive behaviors may play an instrumental role in the attachment process by acting to control and regulate caregiver proximity and attentiveness. Through the use of negative attention-seeking behaviors, such as noncompliance, the child can "lock in" attachment figures based on the use of negative attachment behaviors. It has been suggested that these maladaptive behaviors may fit with the overall schema of family dysfunction (Marvin & Stewart, 1990).

Family systems theory would recognize several problems inherent in this family triad that has few limits and very loosely defined boundaries. Mother, grandmother, and Jeremy seem to be enmeshed in each other's lives (Minuchin, 1985) and, as a result, Jeremy is often privy to information that is well beyond his years. It is also likely that triangulation can occur, with the balance of power and status shifting among the family members, depending on which two members are aligned together.

Today, many grandparents fill the role of *surrogate parent* for their grandchildren (Edwards, 2003). Within the past 20 years, the number of grandparents who assume an active role in caring for their grandchildren has increased dramatically (Cox, 2000; Goodman & Silverstein, 2005). Currently, approximately 4.5 million children are living in grandparent-headed households (American Association of Retired Persons, 2007), with the average age of grandparents in this situation between 55 and 64 (Smith & Dannison, 2002).

Within this situation, family members are often placed in a non-normative relational context that can place grandparents in a conflicted relationship (Cox, 2000), and many grandparents have revealed feelings of being "torn" between tending to their grandchildren's needs and the needs of their own adult children (Musil, Schrader, & Mutikani, 2000). According to Cox (2000), this ambiguous role often leaves grandparents confused regarding how to define their position in the family, while at the same time feeling "responsible for shaping and giving meaning to this new identity, defining it according to their own personalities, resources, and values" (p. 6). In their research, Williamson, Softas-Nall, and Miller (2003) identified a number of positive feelings that grandparents associated with their surrogate role, including the emotional feeling of

grandmothering and being able to contribute; however, a number of negative experiences were also revealed, including depression, financial worries, abuse and neglect of grandchildren, and problems with disciplining the children.

Erbert and Alemán (2008) investigated the dialectical tensions inherent in the grandparenting experience and identified three contradictory processes that occurred in their sample: *connection versus separation* (a feeling of greater connectedness with their family is offset by the loss of their own retirement activities and fears about their inabilities to care for grandchildren), *stability versus change* (becoming reinvolved in the raising of children at a time when the intergenerational gap has widened, e.g., an inability to relate to their social world in the face of fears of increasing gang violence), and *protection versus expression* (fears of being unable to protect the children from threats that are so different from when they raised their children, e.g., gangs, kidnapping, molestation).

Grandparents raising children are twice as likely to be diagnosed with depression than their peers who are not in a caregiver role (Fuller-Thompson, Minkler, & Driver, 2000) and experience lower levels of psychological well-being (Baker & Silverstein, 2008). Grandparent-headed households reveal a significantly higher rate for poverty level than parent-headed households, while children in these families are twice as likely to receive public assistance (Fuller-Thompson et al., 2000).

Social Cognitive Perspective

Parents of aggressive children may be unsuccessful in de-escalating conflict due to a *negative attribution bias* regarding their aggressive children, blaming the defiant behavior on the child's personality trait (e.g., stubbornness), which is beyond the parent's control (Dix & Lochman, 1990; Strassberg, 1995). Especially in ambivalent situations, or when compliance is not immediate, some parents may anticipate more defiance and resistance and act accordingly (Bargh, Lombardi, & Higgins, 1988). The coercion model describes the processes involved in the parent–child exchange that serve to precipitate and maintain aggressive and defiant behaviors (Campbell, Pierce, Moore, Marakovitz, & Newby, 1996; Patterson, Capaldi, & Bank, 1991; Snyder, Schrepferman, & St. Peter, 1997). Within this paradigm, parents' negative schema drive coercive parenting practices that escalate and maintain aggressive child responses, in a pattern of increasing arousal that becomes negatively reinforced (Snyder, Edwards, McGraw, Kilgore, & Holton, 1994). Observational studies of parent–child attempts at conflict resolution have determined that while mothers of nonaggressive boys are successful in decreasing conflict, mothers of aggressive boys tend to escalate conflict (Snyder et al., 1994).

Parents of aggressive children generate fewer cognitive strategies for noncompliance (Azar, Robinson, Hekimian, & Twentyman, 1984). Parent strategies are weakest when required to perform under pressured conditions and tend to dissipate over the course of several trials (Beauchaine, Strassberg, Kees, & Drabick, 2002). 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.

Behavioral Perspective

Mash and Terdal (1997) suggest that behavioral assessments provide a form of data collection that naturally lends itself to an increased understanding of the nature of a problem, the precipitating causes, treatment options, and potential outcomes. By maintaining a focus on the "observable," the behavioral approach to case formulation distinguishes itself from other theoretical approaches that target underlying process.

Based on results of the Home Situations Questionnaire, behavioral analysis revealed two situations that were especially problematic for Jeremy and his parents:

1. Problems with chores (noncompliance when asked to clean up his room)
2. Interruptions while trying to talk on the telephone (Jeremy's demands for attention when parents are otherwise engaged, e.g., talking on the telephone)

In the next section (treatment alternatives), a functional behavioral assessment is conducted and, based on the prevailing assessment information, a behavior management program developed for implementation in the home. The exercise demonstrates how behavioral assessment can be applied to this and future case studies.

Treatment Alternatives and Developing an Intervention Plan

Cognitive–Behavioral Treatment

The cognitive–behavioral approach seeks to understand the link between thinking and behaving. Therefore, the cognitive–behavioral therapist would focus on how Jeremy's faulty belief system might contribute to aggressive behavior. Social cognitive treatment might involve role-play in such areas as social perspective taking, empathy, and self-control. Parent training using cognitive–behavioral methods would focus on negative attributions, emotion regulation, and, ultimately, increasing effective strategies for behavior management.

In their investigation of maternal responses to child noncompliance, Beauchaine and colleagues (2002) investigated whether parents using ineffective and harsh methods of discipline fail to generate alternative solutions due to an availability deficit (limited repertoire) or an accessibility deficit (processing deficit during times of stress). The authors contend that research support for the accessibility bias has important implications for parent training programs devoted to teaching parents alternate methods of child management, since parent attributions may undermine successful use of the skills taught. The authors emphasize the need to address negative attributions and adding an affect-regulation component to parent training programs in order to enhance treatment effectiveness.

Jeremy's Functional Behavioral Assessment and the Behavioral Intervention Plan

Functional Behavioral Assessment. The behavioral framework consists of a four-stage process designed to

- identify the problem,
- analyze the problem,
- implement a plan, and
- evaluate the plan.

Jeremy's noncompliant behavior can be identified as a *behavioral deficit* (low levels of obedience) or a *behavioral excess* (high levels of noncompliance). Placing Jeremy's behaviors within a functional behavior assessment paradigm (see Table C2.1), the goal is to identify the problem as it relates to precipitating conditions, consequences, and results.

One of his parents' presenting complaints is Jeremy's lack of compliance when asked to clean his room. In this case, the *precipitating conditions* would represent the requests initiated by the

parents that would begin the behavioral sequence of events. When faced with these requests, Jeremy demonstrates the following repertoire of *behaviors* (argues, delays, manipulates, refuses). When faced with these behaviors, parents respond with a number of reactions or consequences ranging from doing the task themselves (in whole or part) to escalating battles that may end in either abandoning the request or in harsh punishment.

Table C2.1 Behavior Assessment Paradigm

Precipitating Conditions	*Behaviors*	*Consequences*	*Results (Rewards)*
Requests to clean room (e.g., pick up paper on the floor or put away toys)	Says "It's not fair" *(argues)*	Engagement in conflict	Negative attention Escape/avoid task
	Says he will "do it later" *(delays)*	Repeated requests	Escape/avoid task
	Asks for help *(manipulation)*	Assistance provided	Punishment Physical or verbal aggression Escape/avoid task
	Says "No!" *(refuses)*	Power struggles and escalation of conflict	
		Abandonment of request	

Behavioral Intervention Plan. In developing a behavioral plan, it is preferable to concentrate on increasing a deficit behavior rather than on reducing an excessive behavior. In this case, it is preferable to increase obedient behavior rather than to attempt to reduce noncompliant behavior, since increasing a positive behavior can be inherently rewarding in itself. At this time, the positive reinforcement that Jeremy is receiving due to his noncompliance far outweighs the occasional and inconsistent punishment he may receive. The behavior plan would be to shift the positive reinforcement to obedience rather than reduce noncompliance.

Principles of operant conditioning predict that there are two options available for increasing or maintaining obedient behavior: *positive reinforcement* or *negative reinforcement*. Reinforcements are acts that have a positive outcome and, as such, will be rewarding, thereby increasing the likelihood that a behavior will be repeated. *Positive reinforcement* involves the addition of a reward (e.g., clean your room and you will get a sticker book). *Positive reinforcement,* however, is not always what it appears to be, and in Jeremy's case his parents unknowingly reinforce many of his negative behaviors in various ways: humor (suggesting acceptance), boasting (suggesting pride), and providing increased attention. In this case, Jeremy is rewarded by *negative attention,* which to Jeremy might be better than no attention at all. *Negative reinforcement,* not to be confused with punishment, is also rewarding because it involves the removal of a negative (e.g., if you clean your room, you will not have to take out the trash). Negative reinforcement has sometimes been called *escape* because it allows one to escape a negative consequence. Jeremy's argumentativeness and noncompliance are often negatively reinforcing because they allow him to escape having to do a task. Principles of

learning also provide a set of assumptions for reducing or eliminating behavior: *punishment* that involves adding a negative consequence or *penalty,* removing a positive. Complete withholding of any reinforcement will eventually result in elimination of the behavior, or what the behaviorists refer to as *extinction*.

Although coercion theory from a cognitive framework attends to the underlying processes of negative attribution and emotion regulation, a behaviorist might use the theory to describe the antecedents and consequences of noncompliance. Parents who eventually yield to a child's escalating and demanding behaviors serve to *positively reinforce the child's misbehavior* (child eventually gets what child wants) and at the same time give *negative reinforcement for their own compliance* (cessation of whining and complaining). Therefore, the parent learns that giving in will stop the demands, while the child learns that increased demands result in parent compliance. Since positive and negative reinforcement serve to strengthen behaviors, parent and child become locked in to an escalating and never-ending battle.

The importance of developing early treatment interventions to reduce noncompliant behaviors is evident in the repeated associations of defiant behavior and later maladjustment in adolescence and adulthood. In their meta-analysis of psychosocial treatments for children and youth with oppositional defiant disorder and conduct disorder, Brestan and Eyberg (1998) revealed behavioral parent training programs to be a successful method for reducing deviant behavior in young children.

Home-based, parent-delivered interventions often are the result of programs directed toward *parent management training* (PMT), and research has demonstrated that between one third and two thirds of children show clinically significant improvement (Barkley, 1997, 2006; Kazdin, 1996, 2013). The rationale for PMT is based on the premise that coercive parent–child interchanges and environmental contingencies are predisposing factors in the development and maintenance of oppositional, defiant, and noncompliant behaviors. Given the dynamics involved in this family and the issues of compliance, the goal was to develop a home-based behavioral intervention plan. Barkley (2006) suggests a number of components that are helpful in organizing a behavior intervention plan, including assessment and establishment of a baseline, operationalizing treatment goals, psychoeducation for parents concerning issues of behavior management, monitoring, contingency management, generalization to other settings, maintenance and relapse prevention, and follow-up.

A behavioral intervention program was developed for Jeremy for use in the home, based on behaviors targeted by mother and grandmother on the Home Situations Questionnaire. A written copy of "Jeremy's Star Chart Program" was provided, outlining agreed-upon consequences for rule infractions, such as loss of stars, as well as other possible strategies (time out, logical consequences, loss of privilege). A general description of possible rewards was discussed; however, it was urged that Jeremy also be involved in selecting some of the rewards to increase incentive and participation in the program. Goals of the behavior program were to assist with increasing compliant behaviors and applying a consistent approach to consequencing Jeremy for noncompliance. The program involved posting of house rules on the fridge and dealing with rule infractions through the use of (a) time-out, (b) logical consequences, and (c) a Response Cost Coupon Program. The *Response Cost Coupon Program,* called Jeremy's Star Chart, was illustrated in a booklet with rules outlined for loss of stars, regaining of lost stars, and adding up of star gains to trade for rewards on the Star Chart menu. The program was monitored by weekly telephone contact. An example of the Star Chart is shown in Table C2.2.

Another powerful source of learning is observation. Bandura's (1977) understanding of the social aspects of learning has been instrumental in increasing our awareness of the possible implications of observing the behavior of others. Children's observation and subsequent modeling of adult behavior can have positive (nurturing and empathic caring behaviors) or negative (aggressive responses, e.g., witness of domestic violence) consequences. These responses can be immediately observable or can be evident in a delayed response.

Table C2.2 Jeremy's Daily Star Chart

Morning	*Afternoon*	*Evening*	*Bedtime*	*Total Stars*
✻✻✻✻	✻✻✻✻	✻✻✻✻	✻✻✻✻	

All-Star Rules:

1. Rule-breaking or misbehavior = 1 lost star
2. At the end of each day, stars are added up
3. Jeremy can trade his stars for the following rewards:

5 ✻ = _____ 10 ✻ = _____
15 ✻ = _____ 20 ✻ = _____
25 ✻ = _____ 30 ✻ = _____

Research has repeatedly demonstrated that the nature of parent–child interactions is a strong predictor of childhood noncompliant, defiant, and aggressive behavior patterns. Poor management practices due to ineffective, inconsistent, and indiscriminate parental controls often result in overly harsh but inconsistent discipline and inadequate monitoring of activities. As a result, child noncompliance becomes an effective means of avoidance or escape from doing undesirable tasks such as picking up toys or cleaning a bedroom. Mother and grandmother are often at odds over setting limits and often present Jeremy with contradictory messages. Grandmother is particularly reinforcing of Jeremy's manipulations and often gives in, allowing his successful escape or avoidance of unpleasant tasks. Jeremy's mother often responds with escalating and coercive responses (screaming as loud as possible), likely due to their occasional success ("he couldn't scream as loud, even though he tried, so I won that time"). In this context, Jeremy has learned how to successfully avoid unpleasant tasks on the one hand and learned to model negative behaviors on the other.

POST-CASE QUESTIONS

1. Jeremy presents with symptoms of ADHD and ODD. Using the *DSM-5* (APA, 2013) as a guide describe how Jeremy's symptoms match criteria as outlined in the *DSM-5.* Based on what you have found, would Jeremy meet criteria for either disorder, and if so, which disorder(s) and why?
2. Jeremy's parents indicated two areas on the Home Situations Questionnaire that were in need of behavior management. One problem, compliance with chores, was selected to demonstrate how a functional behavioral assessment and behavior intervention plan were developed to assist in increasing compliant behaviors. What was the second problem that his parents identified? Conduct a functional behavioral assessment and develop a behavioral intervention plan to assist his parents with the second problem.
3. According to Bronfenbrenner (1989), the *mesosystem* predicts the degree to which a system remains healthy, functional, and in balance. Given the information you know about Jeremy's family

and the school system, describe what you believe the current status to be and how you would attempt to maximize the mesosystem between these two environmental contexts.

4. Using coercion theory as the overarching dimension, describe power struggles in the family from the viewpoint of cognitive, behavioral, and family systems theories.
5. From an attachment theory perspective, using information from the case study, the Introduction, and any related outside sources, describe the potential transgenerational effects that are underlying problems with the parent–child interaction. How does having the grandmother living in the home contribute or moderate the effects of attachment issues?
6. Child temperament can be another biological marker influencing a child's response to his or her environment. Using information from the case study, the Introduction, and any related outside sources, discuss the role of temperament in influencing Jeremy's response to situations and other individuals. Explain how this can be better understood within the context of epigenesis.
7. Suggested Individual or Group Presentation Activity: The teacher has asked Jeremy's mother and grandmother to attend a meeting at the school to address Jeremy's increasing non-compliance and difficulties with emotion regulation, especially during less structured activities. Jeremy's mother has requested that the psychologist come to the meeting to share the results of the assessment and assist with planning a behavior program for Jeremy. At a minimum, the meeting will include the teacher, Jeremy's mother and grandmother, and the psychologist. Prepare a script for role-playing each of the player's parts in the meeting and how they could potentially contribute information to assist with developing a case formulation, functional assessment, and behavioral intervention plan. Who else would you want to invite to the meeting and why?

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CASE 3

Neesha Wilson

Phoenix Rising
Risks, Protective Factors, and
Psychological Well-Being

Neesha Wilson, a 10-year-old African American girl, was referred for assessment to the school psychologist as a result of a child study team meeting held at the school in May. Presenting problems included poor school progress and escalating behavioral concerns. It was the school's impression that Neesha might qualify for special education assistance as a child with an emotional disorder. Currently, Neesha has an older brother, Tyrone, who is attending an alternate school program for children and youth with severe emotional disturbance.

DEVELOPMENTAL HISTORY/FAMILY BACKGROUND

The school social worker completed Neesha's initial work-up just prior to the end of the academic term; intake information is summarized as follows:

Neesha lives with her 15-year-old brother, Tyrone, and her mother in a two-bedroom apartment. The social worker described the apartment as tiny but very well kept. Neesha has her own bedroom, and Tyrone sleeps on the couch, which folds out into a bed. The social worker noted that it was difficult to book an appointment with Mrs. Wilson, who was reportedly working two jobs: cleaning offices and working as a hairstylist. Mrs. Wilson graduated from hairstylist classes last year. Although her career as a hairstylist has a lot of potential, she is only beginning to develop clientele. She also works part time cleaning offices. Despite the lack of financial resources, the children were clean, well dressed, and did not miss any meals. The children were on the free-lunch program at the schools. According to Mrs. Wilson, Neesha's early history was unremarkable and motor and language milestones developed on schedule.

An immediate concern of the social worker's centered on who cared for the children when their mother, Tanya, had to work evenings cleaning offices. Tanya stated that it was not a problem for her because she would either send the children to her sister's apartment a few blocks away, or have a cousin who lived in the building check in on the kids. Also, Tyrone was 15, so he was capable of watching his sister, although she preferred to have an adult nearby, given Tyrone's behavior problems.

Neesha's mother described her as an easy baby and said that she never really had any problems with her. She added that it was Tyrone who was giving her all the problems, not

Neesha. The family had struggled since her husband, Walt, left the family about 3 years ago, when Neesha was in Grade 1. In the past two years, Walt has had virtually no contact with the children. He moved in with his girlfriend and their one-year-old baby and recently moved to another state. Neesha was very upset with the marriage breakdown and misses her father very much. Neesha visited with her dad and his new family, initially, but was very disappointed that the visits were neither consistent nor more frequent. Neesha did not like Walt's girlfriend and felt that her father was more interested in the new baby than her. According to Tanya, Neesha often talks about wanting to visit her father and continues to set herself up for disappointment. Tanya blames Walt's lack of involvement with the children for Tyrone's problems, which became more severe after Walt left.

When Walt moved out, Tanya could no longer afford to live in the apartment they were living in. Tanya described the previous 2 years as very difficult for her and the kids. As Tanya spoke, the social worker noted in the file that the mother's affect was very flat. She also seemed preoccupied with her financial situation and said that at times she just wasn't sure how she would make the rent. They have struggled to survive financially, and Tanya often gets depressed and—if she isn't working the evening—either goes to bed early or cries herself to sleep. On these occasions, Neesha is very quiet and tries to comfort her mother. Tanya said that when she woke up the other morning, Neesha had placed a handmade card on her pillow. The card was decorated with hearts and bows and huge letters: "I love you, Mom. Neesha." Tanya said she didn't understand why Neesha was doing so poorly in school because she seemed to love to "play school" on the weekends and in the evening. When asked whether Neesha has demonstrated any behavior problems at home, Tanya said she is more like a little mother than a kid and has no behavior problems at all. Her brother is the problem; Neesha is more like a little adult. She described Neesha as a sweet and loving child who always tries to please.

The social worker expressed her concern to Tanya about her own symptoms of depression and fatigue and wondered if Tanya might see her physician for a referral to talk to a counselor. The social worker stated that she was concerned because Tanya seemed overwhelmed by all the financial stresses the family faced that seemed to be taking their toll on her emotionally. However, Tanya was quick to say that the extended family was very supportive and that her two sisters were always there for her to talk to when she needed it. She also said that her church was a continued source of comfort and support for herself and the children. In addition to information obtained from the clinical interview, the social worker also had Tanya complete the Behavioral Assessment System for Children (BASC-2).

In August, at the beginning of the new term, the school psychologist completed a review of Neesha's cumulative school record and obtained teacher ratings (BASC-2) from her previous years' teachers, which were on file in the guidance office. Neesha's school record contained the following additional information. Neesha began her formal schooling at Franklin Elementary School but transferred schools midway through the Grade 1 program. She completed Grade 1 and Grade 2 at Vista Springs Elementary. She has been attending Heartfield Elementary since her enrollment in the Grade 3 program. Neesha is currently repeating the fourth grade. Neesha's records reveal that her Grade 3 teacher was concerned because Neesha was repeatedly falling asleep in class. Because Neesha seemed overly fatigued, her mother took her to the family physician to check out any possible physical causes; however, no medical reason was evident to explain her fatigue. Last year, Neesha was absent 15 days. On the days she attended school, Neesha was late more than one third of the time (51 days). The school counselor had written a summary report based on her observations of Neesha in the classroom, toward the end of the Grade 4 program, when the paperwork was being collected for her assessment in the fall. The notes indicated that Neesha was off task (*daydreaming, looking out the window, staring out into space*) for the majority of time that she was observed. The observation supported teacher

comments that Neesha often failed to complete her seatwork and handed in assignments unfinished. During another observation session, the counselor recorded that during a 25-minute seatwork session, Neesha completed only 2 out of 8 comprehension questions for a story read aloud in class. Her teacher also reported that, at times, Neesha's lack of attention to task could also result in class-disturbing behaviors such as humming, playing with articles on her desk, and socializing.

As part of the referral process, in addition to notes on classroom observations, the teacher also was asked to record what interventions were attempted and to comment on the success of these attempts. Interventions included sending a daily agenda regarding Neesha's behavior for home signature, providing extra time for task completion, and seating her closer to the teacher's desk. However, the daily agenda often was returned unsigned, since her mother was sleeping, and providing extra time did not increase her productivity. In all, the interventions generally were not successful. Ultimately, the decision was made to have Neesha repeat the Grade 4 program, since she had not completed any assigned tasks during her Grade 4 year, and to place her on high priority for a comprehensive assessment early in the fall term.

The school psychologist saw Neesha for an initial assessment session, early in the fall term. Neesha was very well groomed, with matching accessories and her hair stylishly braided in a way that must have taken hours to complete. When asked about her hair, Neesha was very proud to say that her mother had done it for her, and that her mother was a very good hairdresser. Neesha was very polite and cooperative. Neesha's responses and demeanor suggested a precocious maturity for her 10 years. The psychologist felt that Neesha tried her best on all tasks presented but questioned the validity of overall intellectual scores.

REASON FOR REFERRAL

The school requested assessment due to Neesha's escalating academic difficulties and increased behavioral problems (irritability, moodiness, and beginning to strike out at other children). There were concerns that Neesha might warrant placement in a program for children with emotional problems.

ASSESSMENT RESULTS

Information concerning specific assessment instruments and the interpretation of standard scores and T scores can be found in Appendix C.

Responses to the Wechsler Intelligence Scale for Children (WISC-V) revealed Neesha's overall intellectual score of 92, which was within the average range (IQ range 87–98). However, there were several indicators to suggest that this score was likely an underestimate of her "true potential." Neesha's mature conversational tone, insight, and academic levels obtained on standardized testing suggested intellectual functioning more appropriately suited to the upper average to high average range. Based on her overall obtained score, Neesha performed in the average range of ability at the 30th percentile when compared with children her age. There was minimal difference in her scores for the Verbal Comprehension Index (VCI, standard score of 90), the Visual Spatial Index (VSI, standard score of 95), and the Fluid Reasoning Index (FRI, standard score of 93). Based on these scores, it would be anticipated that Neesha should be performing approximately at grade level academically. An analysis of the individual pattern of test results indicated that Neesha had relative strengths in the areas of the Working Memory Index (WMI = 100), which involves the manipulation of mental information and short-term working memory, and Processing Speed

Index (PSI = 103), which measures speed of copying and scanning information. An analysis of the individual pattern of subtest scores indicated that Neesha had relative strengths in the area of visual analysis and reasoning (picture concepts) and recall for letter and number sequences. Weaknesses were noted in vocabulary development, social judgment, and part-to-whole visual organization (block design).

Academically, according to the Woodcock Johnson Test of Achievement, Neesha's current functioning levels were far in excess of her current grade placement and also exceeded predicted levels according to the WISC-V (which was considered as an underestimate of her intellectual potential). Overall, Neesha was performing at a Grade 7.2 level in Broad Reading (age score of 12.7), Grade 5.8 level in Broad Math (age score 11.4), and Grade 7.9 level in Broad Written Expression (age score 13.2). Overall, Neesha was achieving in the high average range when scores were compared with those of other children her age who would be enrolled in a regular Grade 5 program. When compared with other children enrolled in a regular Grade 4 program (which Neesha was currently repeating), her scores represented functioning in the superior range.

Neesha was cooperative during the clinical interview and provided thoughtful and conscientious responses to the interviewer's questions. When asked what types of things or situations made her feel happy, sad, angry, or frightened, Neesha provided the following information. Neesha stated that "compliments, surprises, and visits with her Dad" were all things that could make her "happy." She said she felt "sad" when kids threaten her or people say bad things about her or her family. She also stated that she gets very sad when her mother cries because she doesn't know how to make it better.

Neesha looked sad as she spoke about her mother, and her voice trailed off as she swallowed hard. Neesha admitted to feeling angry and upset when her older brother (15 years of age) hits her, and she is "frightened" when she visits her aunt's neighborhood, because the kids are loud and scary. In response to what worries her presently, Neesha said that she is worried that she won't be able to advance to the fifth grade this year. She said that she asked her mother to talk to the principal because she is working very hard and wants to go to Grade 5. She said she did not want to be in Grade 4 again, and she is very afraid that the kids will start being mean again and call her names like they did last year. She said she did not want to get into trouble this year like she did last year.

When asked why she was falling asleep in class, Neesha said that in the past she had lots of problems falling asleep but added that was 2 years ago and things were different then. She said that at that time she would come home from school very tired and fall asleep after dinner. Then she would wake up at night and not be able to go to sleep again. She said that she has stopped taking naps in the afternoon and now she doesn't wake up at night anymore. Neesha volunteered that she also worried a lot about things and that sometimes when she worries she has a hard time falling asleep. Not so much now, but it was bad then because she missed her dad and wanted him to come home. She said that last year she got in trouble for being late so many times, but it was hard to wake up. Neesha said that she was tired and had trouble getting herself ready for school. Her mom was sleeping late because she was working more nights cleaning the offices. Neesha said it was a very hard year. She was tired and cranky and just couldn't seem to concentrate on her work. She said she would read a page and then not remember what she read. Neesha said she got so far behind that she just gave up. She was also having problems with the other girls in the class, who were starting to tease her about sleeping in class and not doing her work. She said they called her names like "Sleepy" and "Dummy." She said that at first it made her very sad, and then it made her very mad. That's when she started to hit them to make them stop. When I asked what made the difference this year, Neesha said, for one, she now has an alarm clock. She sets the clock and lets her mom sleep in. The school bus picks the kids up on the corner, so she just goes and waits with the other kids who live in the apartment building. When asked about schoolwork, Neesha

stated that she was very proud of her reading ability and said that she is now concentrating on finishing her work and that keeps her going.

Neesha completed several self-report inventories. Overall response to the Revised Children's Manifest Anxiety Scale (RCMAS-2) revealed total anxiety to be within normal limits. However, there was a significant elevation on the Physiological Indicator scale, and Neesha endorsed several items indicating a generalized heightened state of arousal often associated with stressful conditions, such as trouble getting her breath, feeling sick to her stomach, and hands feeling sweaty. She also admitted to worrying a lot of the time and having problems falling asleep. An elevated validity scale (the Lie scale on the RCMAS) was suggestive of Neesha's tendency to try to project a good image and suggesting that perhaps her anxiety was more of an issue than Neesha was letting on.

Neesha's responses to the Children's Depression Inventory (CDI-2) revealed overall depression level to be within the norm when compared to girls of a similar age. However, the elevation on the Negative Mood scale was significant, indicating problems with sleeping, fatigue, and worry about aches and pains. Neesha also completed the Personality Inventory for Youth (PIY), a 270-item questionnaire that assesses emotional and behavioral adjustment and family characteristics and interactions, as well as school adjustment. The instrument also includes validity scales that identify a respondent's level of consistency and defensiveness. Neesha's scores on the validity scales suggested that her profile was an honest attempt to reflect her current emotional and behavioral concerns. Scores indicated normal concerns typical of girls her age in most areas. However, consistent with the RCMAS, Neesha endorsed a significant number of items indicating somatic concern (T = 73). Scores in this range suggest a large and varied number of somatic symptoms and health concerns, such as fatigue, headache, stomachache, back pain, dizzy spells, trouble breathing, and the like. Results of this kind are often seen in children who worry about and are preoccupied with illness and may become emotionally upset when they are sick. Often these symptoms represent the physical aspects of anxiety and tension. Neesha's particular pattern of endorsement suggests that symptoms are likely connected to feelings of psychological distress within the home.

Projective assessment was also conducted using the Robert's Apperception Test, a series of pictures that are used as prompts for children's stories. The characters in Neesha's stories revealed difficulties in the following areas: conflicts with siblings, fear of being punished for doing something wrong, fear of being ill, and concerns regarding school performance. Family matters included a mother having a new baby and a young girl being a bridesmaid for her parents' wedding. Neesha's drawings for the House–Tree–Person indicated a positive openness to communication and were generally free of suggested pathology.

Two of Neesha's teachers from the fourth grade last year, her current teacher, and her mother completed the Behavioral Assessment System for Children (BASC-2). It should be noted that although the BASC-2 suggests that rating be conducted by individuals who have known the child for at least 6 months, the desire to have a current behavioral rating for comparison violated this suggestion since her current teacher has known Neesha only since the beginning of August (less than 2 months). Therefore, results should be interpreted with caution. The BASC-2 is a comprehensive measurement of common behavioral and emotional problems in children. Ratings of children are interpreted to indicate behavioral concerns that are normal, at risk, or clinical. Behaviors falling within the at-risk range represent an emerging problem area that needs attention but does not warrant a formal diagnosis, while behaviors within the clinical range are problems that warrant attention and intervention.

Ratings are based on the observations of informants in different situations, and it is not unusual for children to behave differently in various situations. Therefore, inconsistencies between informants are not unusual. According to Neesha's teachers last year, there was agreement in several

areas on the BASC-2 ratings. The two teachers rated her behaviors as clinically significant in the following areas: Aggression (physical and verbal), Conduct Problems (rule-breaking behaviors), and overall Externalizing Problems. They also agreed that the following behaviors were at risk: Attention Problems, Leadership, Social Skills, and Study Skills. At-risk or clinically significant elevations were also noted for Composite Adaptive Skills (Adaptability, Social Skills, Leadership, Study Skills). Neesha's current teacher and Neesha's mother have indicated all behaviors currently to be within the normal range.

In the final assessment session, Neesha appeared very positive about her school successes this year and said that she was working very hard to go to the next grade level. When asked if she would like to meet with the school psychologist once in a while, just to talk about her worries, Neesha said that she would like that very much. As she left the office, she turned and thanked the psychologist for working with her, and added, "You know, sometimes, it's hard being a kid." When Neesha's mother came to talk to the school psychologist about the test results, the psychologist mirrored the social worker's earlier concerns about the mother being depressed and preoccupied. Affect was very flat despite the excellent news she was receiving regarding her daughter's academic skills and behavioral turnaround. Her mother reported that what Neesha had accomplished, she had done on her own. She stated that Neesha had received no help from her. Mother appeared preoccupied with the interview making her late for work and asked if she could please leave quickly.

Postscript

Three weeks later, at 10:00 a.m., the school principal received a call from Neesha's mother, who asked that her daughter not be sent home from school because she was going to kill herself. As she spoke on the telephone, she explained that she was holding a loaded gun to her head and that she had to do it, because she was not going to make this month's rent. She could not take it any longer, but she did not want Neesha to come home and find her dead.

While the guidance counselor continued to keep the mother talking, the school principal contacted the police, who apprehended mom while she was talking on her cell phone from her car in the driveway of the apartment building. The loaded gun was on her lap. Mother was Baker Acted (taken into custody due to fears regarding danger to self) and taken to the local psychiatric facility. Currently, mother is on medication for depression.

ISSUES, TRENDS, AND TREATMENT ALTERNATIVES

Considering Neesha's case within the framework of developmental contexts and environmental influences, there are several risk factors that are affecting her development that are not within Neesha's immediate control, including poverty, her mother's mental illness (depression), and living with a sibling who has severe emotional disturbance.

Case Formulation

Unlike the other two cases presented in this introductory section, developing a case formulation for Neesha requires thinking outside the box. Neesha does not present with enough symptoms of depression or anxiety to meet criteria for any specific anxiety or depressive disorder. However, she does meet diagnostic criteria for an adjustment disorder with mixed anxiety and depressed mood. Adjustment disorders are evident as emotional or behavioral symptoms that develop in response to an identifiable stressor and occur within 3 months of the onset of the stressor. Although this stress-related disorder is considered to be a "temporary" condition that

"lasts no longer than 6 months after the stressor or its consequences have ceased" (APA,2013, p. 287), in Neesha's case, she is experiencing ongoing stress related to environmental influences that continue to be present. The *DSM* does specify that "if the stressor or its consequences persist, the adjustment disorder may continue to be present and become the persistent form."

Risks, Protective Factors, and Resilience

Several researchers have focused on the role of protective factors in buffering some children living in high-risk environments. Emphasis has shifted from focusing on risks to determining environmental resources and adaptive strengths in children who do not show early signs of deviance (Richters & Weintraub, 1990). Rutter (1987) noted several years ago that instead of searching for broadly defined protective factors, emphasis needs to be placed on better understanding "why and how some individuals manage to maintain high self-esteem and self-efficacy in spite of facing the same adversities that lead other people to give up and lose hope" (p. 317). Further, Rutter (1990) suggests that we go beyond listing risk factors to looking at the underlying processes or mechanisms that are instrumental in producing the buffering effect. Rutter defines these processes as reducing risk impact, reducing negative chain reactions, increasing factors that promote self-esteem, and opening opportunities. The role of timing (life events) in changing the trajectory away from vulnerability is also discussed. In their discussion of risk and resilience, Werner and Smith (2001) concluded that certain environmental factors, such as positive emotional support from caregivers and mentors, could provide protection from negative outcomes, despite living in adverse conditions. Although resilience was once thought of as a trait, currently, resilience is thought of as "a process or phenomenon reflecting positive child adjustment despite conditions of risk" (Luthar & Zelazo, 2003, p. 510).

Durlak (1998) reviewed 1,200 outcome studies concerning prevention programs for children and identified several common risk and protective factors across seven major outcome areas: behavior problems, school failure, poor physical health, physical injury, pregnancy, drug use, and AIDS. Analysis of risk and protective factors linked each factor with the appropriate developmental context, including individual, immediate (family, school, peers), and community. Durlak found multiple factors playing a protective role for more than one outcome. For example, attending a "high quality school" protected against behavior problems, school failure, early pregnancy, drug use, and AIDS, and having "positive peer models" also protected across the same five areas. Having a good parent–child relationship and good personal and social skills protected across all seven major outcomes. High-risk factors included living in an impoverished neighborhood, low family SES, parental psychopathology, marital discord, and punitive parenting. Stress was considered to be a risk factor that crossed all levels of development, while social support was a protective factor that crossed all developmental levels.

When discussing risk and protective factors, the risks of being in an ethnic minority have rarely been addressed. Gibbs and Huang (2001) emphasize that when ethnic identity is combined with membership in a minority race, children are faced with a dual challenge. The authors also note that ethnic minority status has often been associated with restricted range of opportunities, and children growing up in minority families may be exposed to circumstances and experiences very different from the majority of the community. In addition, there is often an interaction among factors of ethnicity, race, and social class (SES), with higher status typically perceived for White, Anglo-Saxon, middle-class families, and lower status associated with non-White, ethnic minority, and lower class families (Hacker, 1992). In their study of child poverty rates, Lichtner, Quian, and Crowley (2005) found that whereas 9% of White children were living below the poverty line, one third of all Black children and 27% of Hispanic children were living at this level. According to the 2014 census, approximately 38% of African American youth under 18 years of age live below the poverty line, compared with 30% Hispanic, 9.6% Asian and 10.7% Whites (DeNavas-Walt &

Proctor, 2014). Within this context, the role of the family has assumed a position of strength and resilience. One central value that is cultivated by African American families is the importance of being "independent" and the value of independence. In this manner, the family unit is sustained by members who are self-reliant. Other strong family values often include obedience, respect for elders, and emphasis on obtaining a good education. However, culture clash may be evident in the way in which family members or children whose sense of time is fluid and event oriented interact with largely White establishments where time is determined by the clock, calendar, or school agenda (Lynch & Hanson, 1998).

A growing body of research has revealed that maternal depression and depressive symptoms place children and adolescents at increased risk for negative social and emotional outcomes (Goodman & Gotlib, 2002). Recent studies have found that by adolescence, children and youth exposed to maternal depression demonstrate higher levels of internalizing and externalizing problems relative to peers whose mothers are not depressed (Foster, Garber, & Durlak, 2008; Nelson, Hammen, Brennan, & Ullman, 2003). Campbell, Morgan-Lopez, Cox, and McLoyd (2009) found that adolescents whose mothers reported chronic depressed symptoms across their childhood evidenced more symptoms of depression, dysphoria, and loneliness compared to peers whose mothers were without a history of depression. It has also been found that children living in stressful conditions surrounding maternal depression (parent–child conflict, less parental monitoring and supervision) are likely to engage in more risk taking and externalizing behaviors (Wiesner & Kim, 2006). Research has also demonstrated that boys and girls may respond differently to maternal distress, with boys being more inclined to react with externalizing problems, while with increasing age, girls are more likely to develop internalizing problems (Angold, Erklani, Silberg, Eaves, & Costello, 2002). In addition to trajectories that might be predicted by gender, the principles of *equifinality* and *mulifinality* provide different mechanisms to assist our understanding of the nature of different outcomes (Cicchetti & Rogosch, 1996). The principle of equifinality is used to explain how similar symptoms (depression) can result from different sources (e.g., two children may both suffer from depression; however, one child may be reacting to a parental divorce, and another child may be depressed because of peer rejection). The second principle of mulifinality is important in understanding how individuals who experience similar circumstances may be on different paths that will predict very different outcomes. For example, although Neesha shows many signs of distress due to her stressful living conditions, she also demonstrates qualities that suggest resilience in the face of adversity. However, her brother Tyrone, whom we will meet in greater depth in the case study of Tyrone Wilson, has moved further and further along a path of self-destructive behaviors, leading to his recent entry into the juvenile justice system. Therefore, despite living in the same stressful conditions, their outcomes are very different. Children who grow up in less-than-ideal conditions may accept these conditions as part of the "normalcy" of their life and learn to cope with what they have. Others may develop a sense of positive self-esteem and independence that may serve to buffer them from more negative outcomes (Cicchetti & Rogosch, 1997). Yet others, like Tyrone, will follow a path of aggression and retaliation and join others who are on a similar self-destructive trajectory.

POST-CASE QUESTIONS

1. In discussing the plight of resilient children, Luthar (1993) contrasts earlier concepts of the invulnerable child with present concepts of the resilient child. Luthar observed that children who survived difficult circumstances without developing maladaptive outcomes often presented with

more subtle internalizing problems. In Luthar's study, 85% of the resilient children had clinically significant symptoms of anxiety and depression. Similarly, longitudinal data from studies by Werner and Smith (1992) also noted that resilient children in adulthood were plagued with somatic complaints (headaches, backaches) and feelings of dissatisfaction. In the Introduction to this chapter, the topic of resilience and neurobiology was discussed. According to Karatoreos and McEwen (2013), initially an individual can withstand environmental challenges (stressful circumstances) by successful allostatic responses that can contribute to resilience, however, over the course of time, continued stressful circumstances can cause a system to go into "allostatic overload" resulting in overuse of the system and dysregulation (wearing down the system). Discuss Neesha's current clinical profile in light of the information provided by these studies on resilience.

2. In a study of developmental response patterns to maternal depression, Solantaus-Simula (2002) found four response patterns: active empathy, emotional overinvolvement, indifference, and avoidance. Of the four types, children in the emotional overinvolvement and avoidance groups demonstrated the most internalizing and externalizing symptoms, independent of mother's level of depression. Furthermore, children in the active empathy group fared best. They did not feel guilty about their parent's depression and were able to discriminate their experiences from those of the depressed parent, supporting Beardslee's theory (1989) of the protective function of self-understanding. The most common response to maternal depression in the active group was to make some effort to cheer up the parent. Discuss these findings in relation to Neesha's case.

3. The way in which a child responds to distress can be strongly influenced by the cultural context in which the circumstance is embedded. Discuss this comment with respect to Neesha's case.

4. Studies on resilience and maternal depression discussed in the Introduction to this chapter report a number of negative outcomes that can occur for children and youth who are raised by depressed mothers. Some of the reported risks include social withdrawal, inappropriate social skills, increased risk for psychopathology, and dysfunctional physiological systems associated with managing stress and regulating social engagement (e.g., cortisol responses and oxytocin production). Karatoreos and McEwen (2013) discuss how hyper or hypo cortisol reactivity in children of depressed mothers can influence a child's tendency to withdraw socially or demonstrate behavioral inhibition. Describe how Neesha's mother's parenting behaviors may have influenced the development of these behaviors in Neesha.

5. Research regarding promoting resilience in children has focused on two important factors, individual characteristics and influences from family and parenting practices. Discuss possible interventions that would enhance Neesha's opportunities for developing and sustaining resilience.

6. Suggested Individual or Group Presentation Activity: The guidance counselor has asked Neesha's mother to attend a meeting at the school to address Neesha's academic skills and social engagement. The school psychologist and social worker will be invited to attend the meeting, as well as Neesha's teacher. Prepare a script for role-playing each of the player's parts in the meeting and how they could potentially contribute information to assist with developing a case formulation and intervention plan. Who else would you want to invite to the meeting and why?

7. After reading the case of Neesha's brother, Tyrone Wilson, discuss the concepts of mulitfinality and equifinality as they are related to the two case studies.

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