CHAPTER 1

Introduction to Behavioral, Social, and Emotional Problems of Young Children

An increasing focus on the identification of mental health concerns in children and on prevention and intervention strategies has been accompanied by an increasing interest in the social and emotional development of preschool- and kindergarten-age children. Professionals, researchers, parents, and teachers see the early childhood years as an important period in which to provide prevention and intervention services to children who are exhibiting or are at risk for a variety of social, emotional, and behavioral difficulties. This focus on early intervention and prevention is important given that researchers have shown that many children who exhibit emotional and behavioral problems early in life will continue to have such problems throughout childhood and potentially into adolescence and even into their adult years (e.g., Fergusson, Horwood, & Ridder, 2005; Hofstra, van der Ende, & Verhulst, 2002). The preschool and kindergarten years are a time of tremendous development and change, so some instability in behaviors is to be expected, and professionals should be careful to not overpathologize behaviors. However, prevention and early intervention can be tremendously beneficial and should be provided when needed to help improve the lives of children and the adults with whom they interact.

This book provides an overview of evidence-based interventions (those that have research support or appear promising based on research to date) for use with young children. This first chapter briefly reviews the emotional and behavioral problems that may be exhibited by children during the preschool and kindergarten years, as well as the prevalence and continuity of these disorders and their associated risk factors and predictors. Chapter 2 presents information regarding the assessment of young children suspected of having emotional or behavioral problems. Each of the next four chapters presents detailed information about evidence-based interventions for concerns that are commonly seen in the preschool and kindergarten years. Chapter 3 covers externalizing/acting-out behaviors associated with conduct problems, oppositional behavior, and attention-deficit/hyperactivity disorder.

Chapter 4 covers internalizing problems such as fears, anxieties, and depression. Chapter 5 reviews treatments for everyday problems that are commonly seen in preschool- and kindergarten-age children, including toileting problems, feeding issues, and sleep difficulties. Chapter 6 provides a discussion of classroom-based prevention–intervention strategies that can be implemented in preschool and kindergarten classrooms to support the development of both appropriate social–behavioral skills and early literacy skills, with a focus on positive behavioral supports and response to intervention.

OVERVIEW OF DISORDERS

Emotional and behavioral problems in children are typically divided into two general categories: externalizing and internalizing problems. *Externalizing problems* are outer-directed and involve acting-out, defiant, and noncompliant behaviors. *Internalizing problems* are more inner-directed and involve withdrawal, depression, and anxiety. In addition, young children can be diagnosed with neurodevelopmental disorders, including autism spectrum disorder, and commonly exhibit problems that do not fall within either of these general domains (e.g., difficulties with sleep schedules, eating problems, and toileting challenges). In the sections that follow, brief descriptions of the more common emotional and behavioral problems of the early childhood years are provided. Note that this discussion of disorders and problems is not exhaustive but focuses on the disorders that clinicians are more likely to see in their practices when working with young children. These problems are summarized in Table 1.1.

TABLE 1.1. Common Emotional and Behavioral Problems

Externalizing problems
- Attention-deficit/hyperactivity disorder
  - Predominantly inattentive presentation
  - Predominantly hyperactive–impulsive presentation
  - Combined presentation
- Oppositional defiant disorder
- Conduct disorder

Internalizing problems
- Anxiety disorders
  - Specific phobia
  - Separation anxiety disorder
  - Generalized anxiety disorder
  - Social anxiety disorder
  - Selective mutism
- Posttraumatic stress disorder
- Somatic symptom and related disorders
- Depressive disorders
  - Major depressive disorder
  - Persistent depressive disorder

Other problems
- Elimination disorders
  - Enuresis
  - Encopresis
- Feeding and eating disorders
  - Pica
  - Rumination
  - Avoidant/restrictive food intake disorder
- Sleep problems
- Autism spectrum disorder

Externalizing Problems

There are three generally recognized externalizing disorders: (1) *attention-deficit/hyperactivity disorder (ADHD)*, (2) *oppositional defiant disorder (ODD)*, and (3) *conduct disorder (CD)*. Although each of these disorders can be diagnosed in young children, it is rare for a young child to receive the diagnosis of CD, given its more serious nature. However, as will be discussed later, ODD (often considered a developmental precursor to CD) is one of the more common disorders diagnosed during the preschool and kindergarten years. Each of these disorders is discussed in more detail in the following sections.

Attention-Deficit/Hyperactivity Disorder

Over the past several decades, ADHD has received increasing attention in both the research and popular literature. Much of this attention has focused on school-age children, but increasingly researchers are studying ADHD as a syndrome that can be diagnosed in the preschool and kindergarten years. ADHD is defined as "a persistent pattern of inattention and/or hyperactivity–impulsivity that interferes with functioning or development" (American Psychiatric Association, 2013, p. 61). The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5; American Psychiatric Association, 2013) specifies that ADHD is a neurodevelopmental disorder with a childhood onset and requires that "several" symptoms must be present prior to age 12. Additional diagnostic criteria for ADHD include the presence of symptoms across at least two settings and evidence that symptoms interfere with functioning. Obviously, preschool and kindergarten children are, by nature, less attentive and more active than are older children. It is noted in DSM-5 that it can be difficult to differentiate symptoms of ADHD from those of typical young-child behavior prior to the age of 4 and that ADHD is most commonly diagnosed in the elementary school years. However, ADHD certainly is diagnosed in the preschool years, and there are an increasing number of studies on ADHD in preschool children, including the National Institutes of Health-funded Preschool ADHD Treatment Study (PATS) designed to evaluate the use of methylphenidate in preschoolers (e.g., Greenhill et al., 2006; Kollins et al., 2006). In studies specific to preschool children, prevalence rates of ADHD have ranged from approximately 2 to 13% (Bufferd, Dougherty, Carlson, & Klein, 2011; Egger et al., 2006; Lavigne, LeBailly, Hopkins, Gouze, & Binns, 2009; Wichstrøm, Berg-Nielsen, Angold, Egger, Solheim, & Sveen, 2012). In general, these studies have noted a higher rate of ADHD in boys than in girls.

There are three subtypes of ADHD defined in DSM-5: (1) predominantly inattentive presentation (in which the child shows at least six of nine inattentive symptoms but fewer than six hyperactive–impulsive symptoms); (2) predominantly hyperactive–impulsive presentation (in which the child shows at least six of nine hyperactive–impulsive symptoms but fewer than six inattentive symptoms); and (3) combined presentation (in which the child shows at least six symptoms of both inattention and hyperactivity–impulsivity). The factor structure of ADHD and the appropriate classification of subtypes has been a subject of much research for a number of years. Recent investigations into the factor structure of ADHD has taken a hierarchical modeling approach and have found support for a general ADHD factor, as well as the specific factors of inattention and hyperactivity–impulsivity in

general and clinical samples of school-age children (Dumenci, McConaughy, & Achenbach, 2004; Martel, Von Eye, & Nigg, 2010; Normand, Flora, Toplak, & Tannock, 2012; Toplak et al., 2012). However, at least one study found that while hyperactive symptoms loaded on the general ADHD factor, they did not contribute to either of the specific factors (Ullebø, Breivik, Gillberg, Lundervold, & Posserud, 2012). This bidimensional aspect of ADHD has been seen not just in U.S. samples but across a variety of countries representing diverse populations (Bauermeister, Canino, Polanczyk, & Rohde, 2010). More limited research has been conducted on the factor structure of ADHD in preschool-age children and it is not clear whether a two-factor model is most appropriate for preschool-age children or whether ADHD is better conceptualized as a unidimensional construct in young children, as has been found in some studies (e.g., Willoughby, Pek, & Greenberg, 2012). Interestingly, Hardy and colleagues (2007) found problems in terms of statistical fit with one-, two-, and three-factor models of ADHD for preschool-age children. For parent ratings, the two- and three-factor models were "marginally acceptable" but for teacher ratings none of the models had acceptable fit using confirmatory factor analysis. Additional analyses did suggest that the two and three factor models were satisfactory—but with cross loadings of items on the factors.

Although the factor structure of ADHD symptoms in preschool children may not yet be clear, it is generally agreed that there is a developmental progression of symptoms. While hyperactive–impulsive symptoms may be more common in young children, over time children with hyperactive–impulsive symptoms are likely to show an increase in inattentive symptoms and therefore be moved to a combined presentation diagnostic category (e.g., Lahey, Pelham, Loney, Lee, & Willcutt, 2005).

Oppositional Defiant Disorder and Conduct Disorder

ODD is defined in DSM-5 as "a pattern of angry/irritable mood, argumentative/defiant behavior, or vindictiveness" (American Psychiatric Association, 2013, p. 462). Individuals must have at least four symptoms across these three categories of behavior, and the symptoms must last for at least 6 months. ODD has been estimated to occur in 2–13% of preschool-age children (Bufferd et al., 2011; Egger et al., 2006; Lavigne et al., 2009; Wichstrøm et al., 2012). In these preschool-age samples, significant gender differences have not been noted, even though in older children ODD is reported to be more common in boys than girls (American Psychiatric Association, 2013). Symptoms of ODD often first appear in the preschool years and, if they occur in just one setting, are most typically seen first in the home setting (American Psychiatric Association, 2013). Although DSM-5 categorizes symptoms in the three areas just noted, there are no subtypes of this disorder. However, increasingly researchers are noting that ODD may be best conceptualized as having multiple dimensions (e.g., Lavigne, Bryant, Hopkins, & Gouze, 2015), and the presentation type may have implications for the pattern of problems seen over time. While ODD has been noted as a precursor to CD for some children (particularly in boys; e.g., Rowe, Costello, Angold, Copeland, & Maughan, 2010), ODD is also linked to internalizing symptoms such as depression and anxiety (Boylan, Vaillancourt, Boyle, & Szatmari, 2007). In particular, researchers have noted that the irritability dimension of ODD may be linked to internalizing problems (Loeber & Burke, 2011; Stringaris & Goodman, 2009). ODD symptoms can

be identified in the preschool years and, even at that age, different patterns of symptoms can emerge. Preschool-age children who presented with increasing or persistent levels of irritability were associated with poorer outcomes over time, including an increased risk for internalizing and externalizing problem behaviors (Ezpeleta, Granero, Osa, Trepat, & Doménech, 2016).

CD is defined as "a repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated" (American Psychiatric Association, 2013, p. 469). Symptoms in DSM-5 include 15 specific behaviors across four categories: aggression toward people and animals, destruction of property, deceitfulness or theft, and serious violation of rules. Individuals must have at least 3 of the 15 symptoms over the past year and at least 1 symptom over the past 6 months. As noted in DSM-5, CD can be of the childhood-onset type, where symptoms are first present prior to age 10, or of the adolescent-onset type where no symptoms are present prior to age 10. (DSM-5 also allows for an "unspecified onset" in which it cannot be determined when symptoms were first present.) Although CD can occur during the preschool years, the onset is typically later in childhood (American Psychiatric Association, 2013). However, it is worthwhile for clinicians working with preschool- and kindergarten-age children to have a good understanding of both ODD and CD, given the link between the two. In addition, while preschoolers are unlikely to receive a diagnosis of conduct disorder, they may begin to display symptoms of CD in the preschool years, and these symptoms are predictive of later externalizing problems (Rolon-Arroyo, Arnold, & Harvey, 2014). It is also important to note that researchers and clinicians often use the term "conduct problems" to refer to general externalizing behavior problems, and this term should not be seen as synonymous with CD.

Internalizing Problems

Although prevalence rates for specific internalizing problems in young children are often lower than rates for specific externalizing problems, when rates are collapsed across specific diagnoses within these categories, there tend to be similar rates of "emotional" (internalizing) and "behavioral" (externalizing) disorders (Egger et al., 2006; Wichstrøm et al., 2012), and in one study, rates were much higher for emotional disorders (anxiety and depression) than for behavioral disorders (20% vs. 10%; Bufferd et al., 2011). In addition, many young children may not meet criteria for a specific internalizing disorder but may instead exhibit general symptoms such as anxiety, fearfulness, unhappiness, and so forth. If these symptoms are severe enough (whether or not a formal disorder is diagnosed), treatment should be considered. Some of the more common internalizing problems in children are described in this section. Prior to the presentation of some of the specific internalizing disorders, a general discussion of fears and anxieties is presented.

Fears and Anxieties

The terms *fear* and *anxiety* are often used interchangeably; however, there are differences between the two. *Fear* is typically conceptualized as a set of intense physiological responses (e.g., increased heart rate, sweating, shaking) in response to a specific stimulus that is a normal response to a perceived threat. Fear is generally a protective and adaptive response

that alerts a person to danger and thereby helps him or her to survive (Essau, Olaya, & Ollendick, 2013). For example, a child who is face-to-face with a bear would likely experience fear. *Anxiety* is considered to be somewhat more vague and diffuse and is typically not a response to a specific or threatening stimulus. For example, the child who worries about going camping in case a bear is encountered—even though there is no direct threat—may feel tense and apprehensive about the trip (Chorpita & Southam-Gerow, 2006; Morris, Kratochwill, Schoenfield, & Auster, 2008). Fears are a normal part of childhood development as children learn to anticipate danger. The anticipation of danger motivates the child to be cautious, thereby preventing the child from being harmed. For example, as children learn that not all dogs are friendly, they may start being more cautious and asking for permission before petting an unknown dog. However, intense fear, anxiety, or a phobic response to seeing dogs and going out of one's way to avoid dogs would not be adaptive for a child. Thus, it is not necessarily the feeling of worry or fear itself that is problematic but the severity of the response and the associated behaviors.

Children do commonly express some fears (although often not at a clinical level), and particular fears seem to cluster at certain ages. Fears in infancy typically occur as a reaction to the environment, such as fear in response to loud noises and, in later infancy, fear of strangers and separation from caretakers. In the preschool and early elementary school years, fears broaden, often involving natural phenomena such as the dark, storms, and earthquakes, as well as animals, imagined supernatural figures, and loss of caregivers. In the later elementary school years, physical injury and school-related concerns may emerge. As children enter adolescence, concerns about friendships and personal adequacy may become more prominent (e.g., Morris et al., 2008; Warren & Sroufe, 2004). Nighttime fears are particularly prevalent in younger children (Zisenwine, Kaplan, Kushnir, & Sadeh, 2013). Gender differences related to fears seem to be present for some fears and not for others. For example, in one study with children ages 5–16, girls were more likely than boys to have fears of animals, strangers, and the natural environment but not loud noises, the dark, or supernatural figures (Meltzer et al., 2008). There are also age differences in how children express symptoms associated with fear and anxiety. Somatic complaints, including headaches and stomachaches, are commonly seen in preschool- and kindergarten-age children. Whereas older children might talk about feelings of anxiety and distressing thoughts, as noted in DSM-5, younger children more often act out their anxiety through excessive and uncontrollable crying, anger outbursts, tantrums, or clinginess. In addition, children who have experienced some form of trauma, such as abuse, may express their anxiety through repetitive play, a symptom commonly seen in children with posttraumatic stress disorder (American Psychiatric Association, 2013).

Anxiety Disorders

Specific phobias are different from typical childhood fears in that they are more persistent and severe than would be expected for the age and developmental level of the child. As defined in DSM-5, specific phobias involve "marked fear or anxiety about a specific object or situation," and in children this fear can manifest by "crying, tantrums, freezing, or clinging" (American Psychiatric Association, 2013, p. 197). Upon exposure to the object or situation,

the person experiences a fear or anxiety response; often the feared object is avoided to prevent the anxiety response. Adults must recognize that their fear is excessive for the diagnosis to apply; however, children do not need to have this realization in order to receive a diagnosis of specific phobia. The fear must also be persistent, lasting for at least 6 months (American Psychiatric Association, 2013). Although fears are common in young children, as we have noted, specific, diagnosable phobias are less common, with prevalence estimates ranging from less than 1% to about 10% in preschool-age children (Bufferd et al., 2011; Egger et al., 2006; Paulus, Backes, Sander, Weber, & von Gontard, 2015; Wichstrøm et al., 2012).

Specific to children, particularly younger children, is anxiety surrounding separation from primary caregivers. Though this is a typical response in very young children starting in the later part of the child's first year, at older ages and when this anxiety is excessive, the child might receive a diagnosis of *separation anxiety disorder (SAD)* (American Psychiatric Association, 2013). SAD involves "developmentally inappropriate and excessive fear or anxiety concerning separation from those to whom the individual is attached" (American Psychiatric Association, 2013, p. 190). Children with SAD exhibit a high level of distress when separated from their caregivers or in anticipation of separation. Children with SAD often fear that harm will come to their caregivers or that something bad will happen to them (e.g., kidnapping). Children with SAD will attempt to avoid separation. They may exhibit "clingy" behavior with their caregivers and may experience sleep difficulties (including nightmares) and have physical symptoms such as headaches or stomachaches when separation occurs or is anticipated (American Psychiatric Association, 2013) and, for children who are in school, there is a high rate of school refusal (Higa-McMillan, Francis, & Chorpita, 2014). Specific DSM-5 criteria require that at least three of eight symptoms be present and that the fear, anxiety, or avoidance be persistent for at least 4 weeks in children (American Psychiatric Association, 2013). Prevalence rates of SAD in preschool children have been estimated to range from less than 1% to 10% (Bufferd et al., 2011; Egger et al., 2006; Franz, Angold, Copeland, Costello, Towe-Goodman, & Egger, 2013; Lavigne, 2009; Wichstrøm et al., 2012), with most studies not indicating significant differences in prevalence based on gender; however, one study showed that girls were more likely than boys to have this diagnosis (Franz et al., 2013).

Generalized anxiety disorder (GAD) involves "excessive anxiety and worry . . . about a number of events or activities" that occurs "more days than not for at least 6 months" (American Psychiatric Association, 2013, p. 222). The focus of the anxiety can change over time, but the anxiety must remain excessive based on intensity, frequency, or duration. DSM-5 lists six specific anxiety symptoms (e.g., irritability, sleep disturbance), and the anxiety/worry must be associated with at least one of these symptoms in children (although for adults, there must be at least three symptoms) (American Psychiatric Association, 2013). Children with GAD may not necessarily have more worries than typical children but the intensity of these worries is greater (Higa-McMillan et al., 2014). The prevalence of GAD in preschool children has been estimated to be less than 1% (Lavigne et al., 2009), to close to 4% (Bufferd et al., 2011; Egger et al. 2006), to as high as 9% in some studies (Franz et al., 2013). Gender differences were not noted in any of these studies on preschool prevalence of GAD. Although GAD can be diagnosed in the preschool years, there is little research on the specific symptom presentation during the early childhood years. DSM-5 notes that chil-

dren with GAD tend to have excessive worry about school and sports performance (American Psychiatric Association, 2013); however, these issues seem likely to be less relevant for preschool-age children.

Social anxiety disorder (social phobia) involves a "marked, or intense, fear or anxiety of social situations in which the individual may be scrutinized by others" and, in children, this fear must be in peer settings, not just with adults (American Psychiatric Association, 2013, p. 202). These social situations provoke fear or anxiety that, in children, can be expressed by "crying, tantrums, freezing, clinging, shrinking, or failing to speak" (American Psychiatric Association, 2013, p. 202). Symptoms must be present for at least 6 months and must cause some impairment in functioning. Children with social phobia typically have fewer friends than their peers and may be hesitant to join social activities (Higa-McMillan et al., 2014). Social anxiety disorder prevalence rates in preschool-age children range from less than 1% (Wichstrøm et al., 2012) to as high as 7.5% (Franz et al., 2013), with several reporting rates in between these estimates (Bufferd et al., 2011; Egger et al., 2006). Gender differences were not noted in these studies.

Selective mutism involves a "consistent failure to speak in specific social situations in which there is an expectation for speaking (e.g., at school) despite speaking in other situations" (American Psychiatric Association, 2013, p. 195). This disturbance must have lasted for at least 1 month, not be limited to the first month of school, and not be due to a lack of knowledge or comfort with the spoken language required in the social situation (American Psychiatric Association, 2013, p. 195). The onset of selective mutism typically occurs during the preschool years, although it may not be recognized until the child is in a school setting. The course of this disorder may be variable, with some children outgrowing the disorder and others continuing to struggle over time with it or other anxiety disorders (American Psychiatric Association, 2013). Selective mutism has been investigated in fewer prevalence studies than some of the other disorders discussed but has been estimated to have a prevalence of less than 2% (Bufferd et al., 2011; Egger et al., 2006). Differences by gender have not been reported. Prior to DSM-5, selective mutism was not categorized as an anxiety disorder. However, symptoms related to anxiety or actual comorbid anxiety diagnoses have long been noted in studies of children with selective mutism, and some researchers have proposed that selective mutism be considered as an early or special form of social phobia (Muris & Ollendick, 2015). It is important to differentiate selective mutism from other difficulties associated with expressive language, including neurodevelopmental disorders such as autism spectrum disorder and communication disorders, which are likely to be more pervasive. Consultation with parents, as well as referrals to speech–language pathologists, may help rule out some of these other reasons for language difficulties.

Other Internalizing Disorders

Posttraumatic stress disorder (PTSD) is one of several disorders listed in the "Trauma- and Stressor-Related Disorders" chapter in DSM-5. Previously PTSD had been listed with the "Anxiety Disorders," and DSM-5 does note that there is a "close relationship" between trauma/stress disorders and anxiety disorders (as well as several other disorders). New in DSM-5 are criteria specific for children age 6 and younger. PTSD occurs following expo-

sure to a traumatic event either by directly experiencing the event, witnessing the event (especially when directed toward a primary caregiver), or learning about a traumatic event that happened to a parent or caregiver. The traumatic event should involve "actual or threatened death, serious injury, or sexual violence" (American Psychiatric Association, 2013, p. 272). PTSD in young children requires the presence of at least one intrusion symptom (e.g., distressing memories, dreams) and at least one symptom indicative of avoidance (avoiding places or people related to the event) or negative alterations in cognitions (increased negative emotional states; diminished interest in/participation in activities, including play; socially withdrawn behavior; and/or persistent reduction in expression of positive emotions). There also must be changes in arousal and reactivity related to the event with at least two of the following symptoms present: irritable behavior/angry outbursts, hypervigilance, exaggerated startle response, concentration difficulties, and sleep disturbances. (American Psychiatric Association, 2013, pp. 272–273).

The PTSD diagnostic criteria in DSM-5 removed the requirement for "fear, helplessness, or horror." The rationale for the removal of this requirement was that across all ages, it did not seem to improve diagnosis, and for preschool children specifically, their immediate reaction may not be known depending on whether someone was present in the situation (Scheeringa, Zeanah, & Cohen, 2011). Also new in the DSM-5 is the modified criterion for the child to witness or simply learn that a traumatic event occurred to a parent or primary caregiver, instead of only directly experiencing the event him- or herself.

In addition to anxiety and the reliving of the trauma, young children with PTSD often exhibit negative emotional states (e.g., fear, sadness, or confusion), behavioral problems, irritability and angry outbursts, and withdrawal from social contact (American Psychiatric Association, 2013). However, it is important to note that preschool-age children may not always exhibit symptoms consistent with what adults might expect. For example, Scheeringa and colleagues (2011) noted that parents of some children reported a neutral reaction or excitement following exposure to a traumatic event, although anger, sadness, and fear were more common.

The prevalence of PTSD in preschool children is estimated to be less than 1% (Egger et al., 2006). However, higher rates are likely to be found in children who have experienced a traumatic event—at least initially. In an older study, Spence, Rapee, McDonald, and Ingram (2001) reported that while close to 14% of mothers of preschool age children reported their child had experienced a traumatic event, the prevalence of PTSD symptoms was very low, with items reflecting PTSD being endorsed for fewer than 5 of the 65 children who had experienced a traumatic event. In a more recent study of preschool children who had experienced a traumatic event (being burned), PTSD was calculated to be present in 25% of the children at 1-month postinjury and in 10% of the children at 6-months postinjury (DeYoung, Kenardy, & Cobham, 2011) if utilizing modified DSM criteria with only one symptom present in each category. Using DSM-IV criteria resulted in a 5% prevalence rate at 1 month and a 1% rate at 6months. Meiser-Stedman, Smith, Glucksman, Yule, and Dalgleish (2008) also evaluated the use of DSM-IV criteria and modified criteria in the diagnosis of PTSD over time in a sample of 2- to 10-year-old children following a motor vehicle accident. At a 6-month follow-up, 14% of the children met diagnostic criteria using modified criteria and less than 2% met diagnostic criteria using DSM-IV criteria (based on parental report).

DSM-5 includes a new category of disorders, "Somatic Symptom and Related Disorders," replacing the somatoform disorders from the DSM-IV (American Psychiatric Association, 2013). Although children can be diagnosed with somatic disorders, typically they will not meet the criteria for a somatic disorder but, instead, may have somatic symptoms associated with an internalizing disorder, such as anxiety or depression. Although the DSM-IV criteria emphasized that somatic symptoms had no medical explanation, and so were presumed to have a psychological origin, DSM-5 states that it is "not appropriate to give an individual a mental disorder diagnosis solely because a medical cause cannot be demonstrated" (American Psychiatric Association, 2013, p. 309). In addition, it is acknowledged that somatic symptoms can be associated with a medical diagnosis. Somatic symptoms can be common in young children, although such symptoms do not mean that a disorder is present. For example, in a study of 319 kindergarten students, 64% were reported to have had at least one physical complaint in the 2 weeks preceding the study, and 31% were reported to have frequent somatic complaints (Serra Giacobo, Jané, Bonillo, Ballespí, & Díaz-Regañon, 2012). Other studies have had similar findings, with abdominal pain, tiredness, leg pains, headaches, and dizziness among the most frequent complaints of children ages 3–5 (Domènech-Llaberia et al., 2004). In addition, tingling sensations or numbness in the extremities, skin rashes or itching, and breathing problems (e.g., shortness of breath, asthma-type symptoms, or hyperventilation) are also possible (Merrell, 2008b).

Children may be diagnosed with the depressive disorders outlined in DSM-5, including *major depressive disorder* and *persistent depressive disorder (dysthymia)*. Although there are no specific depressive criteria for children, DSM-5 does note that instead of having a "depressed mood," children may exhibit an "irritable mood" (American Psychiatric Association, 2013, p. 160). DSM-5 also notes the symptoms commonly seen in children: irritability, social withdrawal, and somatic complaints. However, young children also can experience the core symptoms of depressed mood, such as loss of pleasure or interest in activities during the day. Other symptoms young children may exhibit include weight loss or gain (including a failure to make expected weight gains in young children), insomnia or hypersomnia, loss of energy, psychomotor agitation, and difficulties concentrating. The child must have had some of these symptoms for at least 2 weeks for the symptoms to be considered a depressive episode. A long-term mild depression (lasting at least 1 year for children) is called persistent depressive disorder (formerly dysthymia), whereas a depressed mood that occurs in response to a specific stressor and resolves usually within 6 months is called an *adjustment disorder with depressed mood* (American Psychiatric Association, 2013). Younger children tend to have low prevalence rates of depression with rates for preschool children estimated at 2% or less (Bufferd et al., 2011; Egger et al., 2006; Lavigne et al., 2009; Wichstrøm et al., 2012). Most studies have not reported gender differences in preschool prevalence rates, although Wichstrøm and colleagues (2012) found that boys had a higher prevalence rate than girls (2.6% vs. 1.5%).

Other Problems

In addition to the disorders that fall within the externalizing and internalizing domains, there are a number of other problems with which children can present for treatment. Some

of these more common "other problems" seen in preschool children, including toileting difficulties, feeding problems, and sleeping problems, are reviewed here.

Toileting problems are commonly seen in young children, although many preschool children may be too young to receive a formal diagnosis of one of the elimination disorders. *Enuresis* involves the repeated voiding (whether involuntary or intentional) of urine in one's clothes during the daytime (diurnal enuresis) and/or while sleeping (nocturnal enuresis). To be diagnosed with enuresis, a child must be "having accidents" at least twice a week for at least 3 months, or there must be signs of significant distress or impairment in functioning (American Psychiatric Association, 2013, p. 355). According to diagnostic guidelines in DSM-5, children must be at least 5 years of age to be diagnosed with enuresis. However, there is significant developmental variability regarding the age at which children achieve dryness. For example, daytime dryness is generally accomplished before nighttime dryness and boys tend to achieve dryness at a later age than girls (Silverstein, 2004). Cultural norms have also impacted the age at which children master toilet training. For example, in the 1940s, toilet training commonly started before 18 months of age, while more recent data have shown that training now generally starts between 21 and 36 months of age (Choby & George, 2008). Enuresis is categorized as either primary or secondary. Children with primary enuresis have never achieved continuous bladder control, whereas children with secondary enuresis have been dry for some period of time (generally 6 months to 1 year) but then cease exhibiting bladder control (Baird, Seehusen, & Bode, 2014). Etiological explanations of enuresis are varied and include factors such as heritability, delayed/abnormal physiological development, inadequate nighttime secretion of antidiuretic hormone, difficulty with sleep arousability, and inadequate learning history (Ramakrishnan, 2008). Less common influential factors include emotional difficulties, such as anxiety, environmental and/or family changes, and a history of trauma or abuse.

Prevalence estimates for enuresis vary, with all estimates indicating a decline in prevalence as children age. It is estimated that approximately 15–20% of 5- to 6-year-old children continue to experience occasional nighttime wetting (Silverstein, 2004). At age 7, the estimated prevalence rate of enuresis is 9% in boys and 6% in girls. This rate decreases to 7% in boys and 3% in girls at age 10 (Robson, 2009). In adolescence, the prevalence rate markedly declines, with approximately 1% of individuals meeting diagnostic criteria (Campbell, Cox, & Borowitz, 2009). This decline with age is due, at least in part, to the fact that approximately 5–10% of children who engage in bed-wetting spontaneously remit each year (American Psychiatric Association, 2013). Enuresis is more than twice as likely in boys than in girls (Butler et al., 2005). Nocturnal enuresis is three times more common than daytime wetting (Ramakrishnan, 2008).

Encopresis involves soiling in inappropriate places, such as clothing, at least once a month for at least 3 months. Children must be at least 4-years of age to receive this diagnosis (American Psychiatric Association, 2013). Prevalence rates of encopresis have been estimated at 5–6% in preschool-age children (Egger et al., 2006; Wichstrøm et al., 2012). Encopresis is typically due to severe constipation and is referred to as retentive encopresis. However, a smaller subset of children (approximately 10% of those with encopresis) exhibit nonretentive encopresis (Burgers, Reitsma, Bongers, de Lorijn, & Benninga, 2013). Nonretentive encopresis includes children who were never fully toilet trained, children with fear-

related avoidance of toileting, children who receive contingent reinforcement for soiling, and children with irritable bowel syndrome (Boles, Roberts, & Vernberg, 2008). Although children must be at least 4 years old to receive a diagnosis of encopresis, children under this age may exhibit toileting problems, such as refusing to use the toilet. Children who exhibit toileting refusal are at greater risk of developing encopresis due to constipation (van Dijk, Benninga, Grootenhuis, Nieuwenhuizen, & Last, 2007). Children with encopresis are significantly more likely to also exhibit difficult temperaments (e.g. stubborn, defiant), as well as emotional and behavioral problems (Campbell et al., 2009).

Feeding and eating disorders covered in DSM-5 include pica, rumination, and avoidant/restrictive food eating. *Pica* involves eating nonnutritive, nonfood items. These items can include a wide variety of substances including paint, fabric, soil, and so on. It is relatively common for infants and toddlers to eat nonfood substances occasionally. This behavior does not necessarily imply the presence of pica, which should only be diagnosed if the behavior is inappropriate for the child's developmental level and persists for at least 1 month (American Psychiatric Association, 2013, p. 329). *Rumination* involves regurgitation of food that then may be rechewed, reswallowed, or spit out. These behaviors must occur for at least 1 month and cannot be better accounted for by a medical condition (American Psychiatric Association, 2013, p. 332). Children with rumination disorder regurgitate partially digested food into their mouths (with no associated nausea, involuntary retching, or disgust) and then spit out or rechew the food. The disorder is most common in infants but is also diagnosed in older children, particularly those with intellectual disabilities or other neurodevelopmental disorders (American Psychiatric Association, 2013). Rumination is voluntary, and children may give the impression of gaining pleasure or satisfaction by engaging in the behavior. *Avoidant/restrictive food intake disorder* involves a disturbance in eating and a failure to meet nutritional energy needs (American Psychiatric Association, 2013). Although all of these feeding disorders may be diagnosed in young children, more typically young children exhibit problems related to feeding and eating that do not meet criteria for a formal disorder. Children may be "picky eaters" or have other issues related to eating (e.g., behavior problems while eating, such as spitting out food) that are not diagnosable disorders. Although these problems do not meet the criteria for a clinical disorder, they can still be highly problematic for parents, and treatment is often warranted.

General childhood feeding difficulties are considered to be quite common, with up to 45% of young children exhibiting difficulties at mealtimes (Adamson, Morawska, & Sanders, 2013). Many childhood feeding difficulties, such as picky eating, mealtime fussiness, and emotional undereating (i.e., eating less in response to stress/negative emotions), are often related to other behavioral difficulties (e.g. emotional dysregulation, noncompliance, hyperactivity) (Blissett, Meyer & Haycraft, 2011). Many of these difficulties are transitory in nature and resolve spontaneously without clinical intervention. However, a smaller subset of children will develop chronic feeding issues, with approximately 25% of typically developing children and 80% of children with developmental disabilities experiencing clinically significant feeding concerns (Manikam & Perman, 2000). Feeding disorders include an array of behaviors that involve failure to eat a sufficient quantity and/or variety of food resulting in chronic malnutrition, poor weight gain, and/or weight loss. The etiology of these problems is varied and includes medical or physical disorders (e.g. metabolic disorder, neu-

romuscular problems), developmental delays, and behavioral/psychosocial issues (Blissett et al., 2011; Schwarz, Corredor, Fisher-Medina, Cohen, & Rabinowitz, 2001). While younger children tend to have more feeding problems than older children, the general trend is for early feeding problems to persist; in fact, these feeding problems may predict eating disorders in adolescence and adulthood (Silverman & Tarbell, 2009).

More recently, increased attention has also been given to early childhood obesity, as more than 20% of children ages 2–5 are already overweight or obese (Institute of Medicine, 2011). While it is often assumed children will "grow out of it," childhood obesity tends to persist into later life and can increase the risk of obesity-related disease in adulthood. In fact, research has shown that a child who is overweight at age 3 is nearly eight times more likely to be overweight as an adult in comparison to a 3-year-old who is not overweight (Parlakian & Lerner, 2007). Of the various factors that can contribute to obesity, environmental factors have been heavily implicated. In a large-scale study conducted in 12 countries, Katzmarzyk and colleagues (2015) noted that environmental–behavioral factors were important in predicting obesity in children ages 9–11, with low physical activity, short sleep duration, and high TV viewing being some of the most predictive ones. In a study specific to preschool children, establishing routines such as eating dinner as a family, getting an appropriate amount of sleep, and having limited TV viewing were predictive of a lower prevalence of obesity (Anderson & Whitaker, 2010). Given the importance of such environmental factors, early childhood interventions may provide the best opportunities to alter habits and routines to help promote healthy lifestyles and healthy weights.

Sleep problems are also commonly reported by parents of young children, with estimated rates of sleep disturbances ranging from 25 to 40% (Meltzer & Mindell, 2006), although most of these problems will not meet official DSM-5 criteria for one of the many sleep–wake disorders. The most common sleep problems in early childhood include bedtime resistance and frequent nighttime wakings. Other common problems include nightmares, night terrors, sleep talking, and sleepwalking. This is also the peak age for obstructive sleep apnea due to enlarged tonsils and adenoids (Meltzer & Crabtree, 2015). These problems will be temporary for some children but will persist over time for others. Persistence of sleep problems is particularly likely to occur when children begin exhibiting sleep problems at a young age (Thome & Skuladottir, 2005). The long-term implications of early childhood sleep disturbances have been shown to be significant. Results of an 11-year longitudinal study of 490 children revealed that sleep problems at age 4 predicted behavioral–emotional problems in adolescence and were equally predictive of anxiety, depression, attention problems, and aggression (Gregory & O'Connor, 2002).

Autism Spectrum Disorder

Autism spectrum disorder (ASD) is another disorder that is often first diagnosed in the preschool years, especially with the increased emphasis on screening for ASD at well-child visits during the early childhood years. Due to the complex nature of ASD and the interdisciplinary approach needed to address the behaviors associated with this disorder, the treatment of ASD is beyond the scope of this book. However, given that it is commonly identified at an early age, it is important for clinicians working with young children to have

some knowledge of this disorder. Therefore, we provide a brief overview here, as well as some information on the assessment of ASD in Chapter 2. Clinicians interested in reading more about the treatment of ASD may wish to consult several of the recent books in this area (e.g., Chawarska, Klin, & Volkmar, 2010; Prelock & McCauley, 2012). Websites such as those from Autism Speaks (*www.autismspeaks.org*) and the UC Davis Mind Institute (*www.ucdmc.ucdavis.edu/mindinstitute*) can also be sources of further information on ASD.

The definition of ASD changed rather substantially between DSM-IV and DSM-5. In DSM-IV, there were several pervasive developmental disorders, which included autism, along with Asperger's disorder (now termed Asperger syndrome), childhood disintegrative disorder, Rett's disorder, and pervasive developmental disorder not otherwise specified. In DSM-5, there is one disorder: autism spectrum disorder. All DSM-IV disorders, except Rett's disorder, are subsumed under DSM-5's ASD diagnostic category. Rett's disorder is seen as a separate genetic condition; individuals with Rett's may qualify for an ASD diagnosis if they meet all of the ASD criteria, but they should not be diagnosed with ASD solely because they have Rett's disorder (American Psychiatric Association, 2013).

Criteria for ASD are divided into two primary categories. Children must show "persistent deficits in social communication and social interaction across multiple contexts" and "restricted, repetitive patterns of behavior, interests, or activities" (American Psychiatric Association, 2013, p. 50). For each of these domains, a severity indictor must be provided: Level 1—requiring support, Level 2—requiring substantial support, and Level 3—requiring very substantial support. There are three criteria listed under the social deficit category, and children must exhibit all three to receive an ASD diagnosis. These are deficits in the following areas: social–emotional reciprocity; nonverbal communication behaviors used in social interactions; and developing, maintaining, and understanding relationships (American Psychiatric Association, 2013, p. 50). Four types of restricted/repetitive behaviors are listed, and children must exhibit two of these four: (1) stereotyped or repetitive motor movements, use of objects, or speech; (2) insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behavior; (3) highly restricted, fixated interests that are abnormal in intensity or focus; (4) hyper- or hyporeactivity to sensory input or unusual interest in sensory aspects of the environment (American Psychiatric Association, 2013, p. 50). Symptoms of ASD must be present in the "early developmental period."

The Centers for Disease Control and Prevention (CDC) funds the Autism and Developmental Disabilities Monitoring (ADDM) Network, which provides data on the prevalence of ASD in the United States. The current estimate of the prevalence of ASD is 1 in 68 children (14.6 per 1,000) as evaluated by medical and special education records of 8-year-old children in 2012). This estimate is almost identical to that from 2010 (14.7 per 1,000) but higher than estimates from 2008 (11.3 per 1,000) as well as other previous years dating back to 2000, when the estimate rate was 6.7 per 1,000 (Christensen et al., 2016). The ADDM Network report notes that ASD is more common in boys than in girls, with 1 in 42 boys having an ASD diagnosis and 1 in 189 girls having a diagnosis. When looking at differences by race/ethnicity, non-Latino/a, Caucasian children were more likely to receive an ASD diagnosis than were non-Latino/a African American children and Latino/a children. There were no gender or race/ethnicity differences in the average age of first diagnosis (50 months). However, a greater percentage of non-Latino/a Caucasian children received evaluations at or before the age of 36 months than did Latino/a and African American children. There were also differ-

ences in prevalence rates by geographic region. Of the 11 states included, the highest prevalence rates were in New Jersey (24.6%), Maryland (18.2%), Utah (17.3%), and North Carolina (16.9%), and the lowest rates were in Wisconsin (10.8%), and Colorado (10.8%) (Christensen et al., 2016). (Although it should be noted that in states with data from health and educational records, rates were higher than in states with only health records. In Maryland, which had rates calculated both ways, the rate was 8.2% with just health records.)

The causes and risk factors for ASD are complex and likely multifaceted, and a great deal of ongoing research in this area attempts to better identify them. Researchers have noted that ASD likely has a genetic/biological component, and various other factors such as prenatal/perinatal and environmental factors can lead to increased risk of ASD (Chaste & Leboyer, 2012; Durand, 2014). Although there has been much discussion about the potential connection between childhood vaccines and ASD, this link has been disproven (e.g., Parker, Schwartz, Todd, & Pickering, 2004; Taylor, Swerdfeger, & Eslick, 2014), and it is important for parents and clinicians to be aware of this fact.

Children with ASD are at higher risk for other disorders with high rates of comorbidity noted in several studies. For example, Salazar and colleagues (2015) evaluated comorbidity rates in a sample of 101 children ages 4–9 who had an ASD diagnosis and found that 90.5% of these children had another DSM diagnosis. The most common comorbid diagnoses were GAD (66.5%), ADHD (59.1%), and specific phobia (15.1%). These findings are consistent with an earlier study of 10- to 14-year-old children (Simonoff et al., 2008), in which 70.8% of the sample had a least one comorbid disorder. In this sample, the most common comorbid disorders were social anxiety (29.2%), ADHD (28.2%), and ODD (28.1%). In addition, a study with 9- to 16-year-old children with Asperger syndrome or high-functioning autism, also showed very high comorbidity rates (Mattila et al., 2010). Of this sample, 74% met criteria for a current comorbid disorder and 84% met criteria for a lifetime comorbid disorder, with the highest comorbidity rates for ADHD (38%), specific phobia (28%), and tic disorders (26%).

As should be clear from this discussion, ASD is a complex disorder and although there are core characteristics that every child needs to have to receive a diagnosis, actual presentation in terms of severity and comorbid disorders can vary widely. While early intervention for ASD seems to be critical, the research on evidenced-based interventions for ASD still leaves many unanswered questions about long-term outcomes, the specifics of what interventions are the most effective, and what interventions work for very young children (Rogers & Vismara, 2008). In a recent overview of five meta-analyses conducted on early intensive behavioral interventions (EIBIs) for ASD, the authors concluded that the effects of EIBIs were "strong and robust," while also noting the importance of a better understanding of the moderating factors on treatment, as well as a better understanding of what specific treatment components are most important and how EIBIs are being implemented outside of treatment studies (Reichow, 2012).

Summary of Problems

There are a number of social–emotional–behavioral problems that young children may exhibit. Although the review of disorders was organized around DSM categories, as noted throughout, many preschool and kindergarten children who are referred for emotional and

behavioral problems will not receive a diagnosis of a specific disorder. In many instances, a full diagnostic assessment may not be needed or warranted. For example, a clinician may choose not to attach a diagnosis to a preschool or kindergarten child who is exhibiting general acting-out behavior problems. Instead the clinician may complete an assessment (e.g., parent interview, rating scale) to gather information on the nature of the problems but not tie the assessment results to a formal diagnosis if it is not required for treatment purposes (e.g., insurance reimbursement, access to services). In other situations, a full diagnostic assessment may be undertaken, and the child may not meet the criteria for a formal diagnosis, although the child may still exhibit sufficient problems of concern to the parent or teacher to warrant intervention. It is important that clinicians not fall into the trap of thinking that a diagnosis is necessary in order for treatment to be provided. Although a formal diagnosis may help guide treatment selection, it is typically more important to identify specific behaviors of concern to address in treatment than to assign a DSM-5 diagnosis.

PREVALENCE OF MENTAL HEALTH CONCERNS IN YOUNG CHILDREN

In the previous section, we cited several studies that examined the prevalence estimates of disorders in preschool-age children. Until the past decade or so, the data regarding the prevalence of specific emotional and behavioral problems in young children were scarce. However, as interest in this population has grown, and clinicians and researchers have realized that young children can meet criteria for specific disorders, the number of studies related to the epidemiology of preschool disorders has increased. As diagnostic tools with young children have improved, epidemiological studies examining DSM diagnoses with preschool-age children have also increased. For example, a number of recent studies (e.g., Bufferd et al., 2011; Lavigne et al., 2009; Wichstrøm et al., 2012) have utilized the Preschool Age Psychiatric Assessment (PAPA; Egger & Angold, 2004) or the Diagnostic Interview Schedule for Children—Young Child (DISC-YC; Lucas, Fisher, & Luby, 1998). Both of these are diagnostic interviews (conducted with parents) developed for the evaluation of symptoms in preschool-age children.

Tools based on the DSM are certainly not without controversy. Arguments against the use of the DSM with young children include the following: (1) the symptoms are too subjective, (2) the symptoms do not apply to preschool- and kindergarten-age children, and (3) the reliability and validity of the diagnoses have not been established with young children. Increasingly researchers are finding support for the same structure of symptoms in preschool-age children as in older children. For example, Sterba, Egger, and Angold (2007) found that internalizing symptoms in preschool-age children followed patterns similar to those noted in older children with emotional symptoms, based on three factors: social phobia, social anxiety, and major depression/generalized anxiety. A three-factor model was also the best fit for disruptive symptoms, with the factors being oppositional disorder/conduct disorder, hyperactivity–impulsivity, and inattention. Strickland and colleagues (2011) obtained similar results in their study but found that a four-factor model (with major depression and generalized anxiety as separate factors) fit better than did the three-factor model.

However, contrary to these findings, Olino, Dougherty, Bufferd, Carlson, and Klein (2014) found that a two-factor model representing internalizing and externalizing symptoms best fit their data. They also found that all symptoms except phobic ones loaded on one common general factor. In a study specific to anxiety disorders (and based on DSM-IV diagnoses), researchers found support for differentiation among anxiety disorders, with GAD, obsessive– compulsive disorder (ODD), SAD, and social phobia emerging as separate factors and fitting the data better than one undifferentiated model (Mian, Godoy, Briggs-Gowan, & Carter, 2012). Given the limited number of studies in this area and the lack of clear consensus, it is likely that more research will be needed to help clarify the structure of symptoms in young children.

Several recent studies that have been conducted on the prevalence of DSM disorders in preschool children are briefly reviewed here. They include all those cited in the earlier discussion of the prevalence rates of individual disorders. In this section, a broader overview is provided. Studies specific to individual disorders are not included in this summary.

Wichstrøm and colleagues (2012) utilized the PAPA to evaluate the presence of disorders in a large sample of Norwegian children. Parents of all children born in 2003 or 2004 in one Norwegian city were invited to participate. Initially 2,475 children were screened utilizing the Strengths and Difficulties Questionnaire (SDQ), and a subset of the parents ($n = 995$) of these children (representing children across the spectrum of SDQ scores) were administered the PAPA. A total of 12.5% of children met criteria for at least one disorder. Encopresis was the most common disorder reported (6.4%). When this disorder was removed, the overall prevalence of disorders was 7.1%, with no single disorder having a prevalence rate over 2%. Overall, more boys evidenced problems than did girls, with ADHD, depression, and sleep disorders being more common in boys. Differences in prevalence were also noted for parental socioeconomic status (SES), with much higher rates of disorders in children from lower SES families (12.8% for any disorder except encopresis) than higher SES families (4.7% for any disorder except encopresis). Significant differences based on family SES were noted for ADHD, CD, ODD, dysthymia, depression, and SAD.

Lavigne and colleagues (2009) utilized the DISC-YC as well as the Child Symptom Inventory (CSI) checklist to examine the prevalence of disorders in a sample of 796 4-year-old children from the Chicago area. Using the DISC scores and any impairment level (incorporating any child who met minimum criteria for a disorder), ADHD (12.8% for any type) and ODD (13.4%) were considerably higher than those noted by Wichstrøm and colleagues (2012). Rates of internalizing symptoms (anxiety and depression) were lower, under 1%. Results utilizing the CSI were similar, although there were higher rates for anxiety disorders (GAD was 2.1% and SAD—not measured with the DISC—was 3.9%) and ADHD (15.5%), but lower rates for ODD (5.2%). In this sample, gender differences were noted only for ADHD, with more boys than girls displaying symptoms of ADHD. No significant differences were noted by racial/ethnic groups when SES and the number of analyses conducted were controlled for.

Bufferd and colleagues (2011) utilized the PAPA in evaluating 541 3-year-old children residing in the Stony Brook, New York, area. Overall, 27.4% of children met the criteria for at least one disorder. ODD (9.4%) and specific phobia (9.1%) were the most common diagnoses. SAD (5.4%) was the only other disorder with a prevalence rate over 5%. Depressive

disorders (1.8%), selective mutism (1.5%), and panic disorder (0.2%) were the least commonly reported diagnoses. The authors reported that diagnoses were not associated with demographic variables such as SES, sex, or race/ethnicity, with a couple of exceptions (e.g., specific phobias were more common in lower SES families).

In an evaluation of the reliability of the PAPA, Egger and colleagues (2006) reported on the prevalence of disorders in a sample of 307 children ages 2–5. Youth in this study were drawn from a pediatric outpatient clinic in Durham, North Carolina. Because one of the purposes of the study was to evaluate the PAPA, researchers administered the measure twice to all participants with test–retest intervals ranging from 3 days to 1 month. The overall prevalence of any disorder (excluding elimination disorders) was 16.2% at time 1 and 14.1% at time 2. In general, the prevalence of disorders at time 2 was lower than at time 1, although the difference was significant only for SAD, GAD, and CD in terms of the specific disorders assessed.

Although having the estimates of prevalence rates can be helpful for clinicians, it is important to keep in mind that the interventions discussed here are not designed specifically for any one DSM disorder but, rather, are directed at treating the *specific set of symptoms* the child is exhibiting. This is in line with the more recent focus on transdiagnostic approaches to intervention in which treatment approaches are not tailored to a specific disorder but can be used across diagnostic categories to address common core mechanisms or processes. This approach may be particularly valuable in children given the comorbidity of problems as well as changing nature of symptoms over the time (Ehrenreich-May & Chu, 2014).

THE IMPACT OF BEHAVIORAL, SOCIAL, AND EMOTIONAL PROBLEMS IN SCHOOL SETTINGS

Problem behaviors in children can have significant and adverse outcomes on a variety of variables, including those related to the school setting. While it may not seem as though problems in the preschool and kindergarten years would adversely impact future school performance, this is not the case. In fact, data indicate that prekindergarten (PreK) children in state-funded programs are expelled at 3.2 times the rate of K–12 students, with approximately 10% of sampled teachers reporting expelling at least one child over a 12-month period (Gilliam, 2005). There were notable differences by state (e.g., Kentucky reported no expulsions for PreK children and New Mexico reported 21.10 per 1,000 students), as well as age (older PreK children were more likely to be expelled), gender (more boys were expelled), and race/ethnicity (more African American children were expelled), which may indicate different applications of standards across different settings and groups. On a positive note, access to a mental health consultant was related to lower expulsion rates.

Social and behavioral problems in the early childhood years may have a sustained impact in the later grades. Researchers looking at both externalizing and internalizing problems in young children found that elevated levels of both of these types of problems were predictive of academic problems in first grade (Bub, McCartney, & Willett, 2007). In a longitudinal study that followed children from grades 1–6, researchers found that

children with externalizing and internalizing problems in first grade had lower academic achievement and social competence in sixth grade than students without problems (Henricsson & Rydell, 2006). In another study, child aggression (but not general externalizing behaviors) in the early years (ages 2–3) predicted increased academic difficulties at age 7 (Brennan, Shaw, Dishion, & Wilson, 2012). Other researchers have found that inattention in the toddler years uniquely predicts reading problems in second grade (Gray, Carter, Briggs-Gowan, Jones, & Wagmiller, 2014). These behavioral issues at the classroom level (in addition to the individual child level) can have an adverse outcome on school readiness. For example, similar to other studies, Bulotsky-Shearer, Dominguez, and Bell (2012) found that both "overactive" and "underactive" behaviors in the preschool setting were predictive of more cognitive, social, and motor difficulties in the classroom setting. They also found that high classwide levels of underactive behaviors were associated with lower school readiness. Other researchers have looked both at behavioral problems and behavioral competencies (noting that these are not necessarily mutually exclusive) and found that behavior competence predicts positive academic functioning even after taking into account externalizing problems and background characteristics (Kwon, Kim, & Sheridan, 2012). This finding is consistent with other research findings that suggest child competencies mediated the relationship between problem behaviors in the preschool years and academic and social competence in first grade (McWayne & Cheung, 2009). These studies suggest that a sole focus on problem behaviors (without looking at positive behaviors too) may provide incomplete information regarding a child's trajectory.

In addition to the negative impact that child behavior problems can have on individual child outcomes, they can also have a negative impact on classroom and teacher outcomes. Friedman-Krauss, Raver, Morris, and Jones (2014) found that classroom-level behavioral problems in the fall predicted increased teacher stress in the spring. In a longitudinal study from preschool to third grade, researchers found that child externalizing problems were related to teacher–student conflict and this relationship was bidirectional (Skalická, Stenseng, & Wichstrøm, 2015). Similarly, findings from a study with preschool-age children showed a bidirectional relationship between child externalizing problems and teacher–child conflict (Zhang & Sun, 2011).

STABILITY OF BEHAVIOR PROBLEMS

An increasing body of literature has made it clear that behavior problems in preschool and kindergarten children are often (although not always) stable over time. An often-cited early review on the continuity of problems noted that of children who are identified as having externalizing problems during the preschool years, approximately 50% will continue to have behavior problems over time (Campbell, 1995). As discussed in more detail below, more recent studies have also indicated that many children who first evidence problems in the early childhood years will continue to struggle with emotional–behavioral concerns as they grow older.

Much of the research on the stability of specific disorders diagnosed in the preschool years has been focused on externalizing disorders. While many studies have short-term follow-up periods, longer-term follow-ups are important in knowing of implications beyond

the preschool years. In a study specific to ADHD, children initially diagnosed at ages 3–5 were followed for 6 years (Riddle et al., 2013). Researchers administered both the parent and teacher versions of the Conners Rating Scales at 3-, 4-, and 6-year follow-up periods. Although symptoms showed a decrease from baseline to the 3-year follow-up, symptoms remained relatively stable over the following 3 years, and parent-rated scores tended to remain in the clinical range (although the same was not true for teacher ratings, with these falling below clinical cutoffs at follow-up periods). When looking at diagnosis stability, 76% met the criteria at year 3 and 77% at year 6 (regardless of medication status). When taking into account behaviors while not on medication, diagnostic rates were higher (90% at year 6). A comorbid diagnosis of ODD/CD substantially increased the likelihood of an ADHD diagnosis at year 6.

When specifically looking at internalizing disorders in later years, preschool-age children with anxious-fearful behaviors as well as hostile-aggressive behaviors, as measured by parent-report questionnaires, were at increased risk for emotional difficulties at ages 10–12 (Slemming et al., 2010). In a large longitudinal study on the stability of anxiety initially diagnosed in the childhood years (although not necessarily in the preschool years), there was a good degree of diagnostic consistency over time, with the highest consistency found for phobic and social anxiety disorders (Carballo et al., 2010). Bosquet and Egeland (2006) also noted the moderate stability of anxiety symptoms over time from the preschool to adolescent years based on correlations between symptoms at different ages.

In a study not specific to diagnoses, in which Pihlakoski and colleagues (2006) followed a community sample of children from ages 3 to 12 using the Child Behavior Checklist (CBCL) and Youth Self-Report (YSR), approximately 30% of children who were in the clinical range on the CBCL at age 3 were also in the clinical range on the CBCL at age 12, with approximately 20% in the clinical range on the YSR. When looking at specific syndrome scales, the aggressive behavior and destructive behavior scales were predictive of later problems across a variety of subscales.

Better understanding of not just diagnoses but the stability of symptoms and symptom clusters is also important. In particular, given that preschool children are not known for their behavioral and emotional regulation skills, understanding what behaviors may be more normative and not predictive of later problems and what behaviors may be more of a cause for concern is important. In a recent study, Hong, Tillman, and Luby (2015) used diagnostic interviews (including the PAPA) to evaluate children in the preschool years (ages 3–5) and again in the early school years (ages 6–9). Behaviors that were not predictive of continuing problems included losing one's temper, low-intensity property destruction, and low-intensity deceitfulness/stealing. In contrast, high intensity of property destruction, deceitfulness/stealing, argumentative/defiant behaviors, and peer problems, as well as both low- and high-intensity aggression toward people and animals, were predictive of later school-age conduct problems.

In a group of children who were identified as having CD at age 5, not only were they more likely to continue to display symptoms consistent with CD at age 10 (compared to controls without CD), they were also more likely to have poor academic performance, have a greater need for special education services, and require more teacher effort (Kim-Cohen et al., 2009). Even in the group of children who no longer qualified for a CD diagnosis at

age 10 (62.5% of the initial CD sample), they continued to have significantly higher scores than controls on multiple CBCL subscales (more by parent report, less by teacher report) and were more likely to require special education services.

Given these research findings, it seems likely that many children who are identified as having emotional and behavioral problems during the preschool years will continue to exhibit problem behaviors beyond preschool. Therefore, the preschool years are an ideal time to intervene. Although not all young children identified as having problems continue to have problems at later ages, certainly the substantial number of children who do so warrants more attention to treatment for this age group. If interventions are successful with preschool- and kindergarten-age children, the number of children in need of interventions later in life and the complexity of the interventions needed should be reduced.

PREDICTORS OF PROBLEMS

With the mounting evidence that many preschool- and kindergarten-age children who are identified as having behavioral problems continue to have such problems, researchers have begun to investigate the factors that mediate long-term outcomes. If the factors that lead to initial and continued problems and those that contribute to a decrease in later problems can be determined, then it would be easier to develop interventions targeted to the populations that would benefit the most. In the following sections (and in Tables 1.2 and 1.3), the factors that have been noted to predict problems over time are summarized.

Predictors of Externalizing Problems

Many of the factors identified as contributing to both the initial expression of behavior problems, as well as their long-term stability, are related to characteristics of the child's family. Parenting behaviors are probably the most studied of these factors and have consistently been related to child behavior problems. Gerald Patterson is perhaps the best known for developing models in this area, and Patterson's coercive parenting cycle model is cited extensively as a predictor of child externalizing problems (Patterson, 1982). Many of the family-based interventions for child behavior problems are based, in large part, on this

TABLE 1.2. Predictors of Externalizing Problems in Young Children

Parent characteristics	Child characteristics
Parenting behaviors (e.g., coercive parenting, negative discipline strategies)	Insecure attachment
Parental stress	Difficult temperament/poor self-regulation
Parental psychopathology	Physiological regulation
Family dysfunction	
	Demographic variables
	Low socioeconomic status
	Low birthweight
	High violent TV viewing

model. In the coercive parenting pattern, parents make repeated requests of their children, who do not comply with these requests. Eventually the parent backs down from the request, due to the negative or aggressive behaviors exhibited by the child. Thus the parent negatively reinforces the child by withdrawing the aversive command or request. The parent, in turn, is negatively reinforced by the discontinuation of the aversive behaviors the child was exhibiting. Typically, there is an escalation in this pattern, with parents eventually resorting to more severe methods of discipline in attempts to obtain compliance. The use of these severe methods is often reinforced by the child stopping his or her negative behaviors only once the severe methods are used. In this pattern, both the parent and child tend to escalate their use of negative and aggressive behaviors. These parenting patterns are likely evident from an early age, with a number of studies noting a link between parenting behaviors in the preschool years and later externalizing problems (e.g., Heberle, Krill, Briggs-Gowan, & Carter, 2015).

Parental stress and family dysfunction are important factors in predicting both the initial onset of problems, as well as the continuation of such problems. Preschool children whose parents experience significant distress are more likely to develop externalizing problem behaviors (e.g., (Heberle et al., 2015; Miller-Lewis et al., 2006), although this effect may be mediated by ineffective parenting practices (e.g., Heberle et al., 2015). The presence of parental psychopathology in children's preschool years has also been linked to the presence of externalizing problems (Breaux, Harvey, & Lugo-Candelas, 2014).

Although much of the research on predictors of externalizing behavior problems has focused on parent characteristics, more recent research has examined child-focused factors that may contribute to the expression of externalizing problems. Child temperament and self-regulation are two child-focused factors that may be linked to later difficulties. Low levels of inhibitory control have been linked to externalizing problems across samples representing different ethnic/cultural groups (e.g., Olson et al., 2011). Child temperament has also been linked to later externalizing problems when the temperament is characterized as more inflexible and less persistent (e.g., Miller-Lewis et al., 2006). Physiological regulation (as measured by respiratory sinus arrhythmia which is involved in heart rate variability) in the early preschool years has also been noted to be related to later externalizing problems, with greater physiological regulation at age 3 associated with a decreased risk for later externalizing problems (although such a relationship was not seen at ages 4 and 5; Perry, Nelson, Calkins, Leerkes, O'Brien, & Marcovitch, 2014).

Attachment has also been evaluated as a child factor that may be related to the development of externalizing problems, with several studies noting a link between insecure types of attachment in the preschool years and the development of externalizing problems (e.g., Fearon, Bakermans-Kranenburg, van IJzendoorn, Lapsley, & Roisman, 2010; Moss, Cyr, & Dubois-Comtois, 2004). In addition, one study noted that a secure attachment may moderate the association between harsh parenting and child aggression (Cyr, Pasalich, McMahon, & Spieker, 2014) in that a secure attachment can serve as a protective factor when harsh parenting practices are in place. Interestingly, researchers have noted that preschool-age children who have a less secure attachment with their mothers but have a high-quality relationship with their teacher do not show an increased risk level for behavior problems when compared to youth with a secure attachment to their mothers (Buyse, Verschueren,

& Doumen, 2009). Thus, the relationship between attachment and problem behaviors may be more complex than it appears based solely on the parent–child attachment relationship.

Demographic variables also have been related to externalizing behavior problems. For example, SES has often emerged as a predictive factor, with low SES related to high levels of externalizing problems (Piotrowska, Stride, Croft, & Rowe, 2015). Another predictor that has been linked to a potential increase in externalizing problems includes low birthweight (Bohnert & Breslau, 2008). Interestingly, higher rates of television viewing have also been correlated with reports of increased inattentive/hyperactive behaviors, as well as antisocial behaviors in young children, although the relationship with antisocial behavior seems to hold true mostly for television content that is violent in nature (Christakis & Zimmerman, 2007), while for inattention problems the association was more broadly with "noneducational" content rather than specific to a type of content (Zimmerman & Christakis, 2007).

As research methods and statistical analysis have become more sophisticated over time, researchers are increasingly able to examine the possibilities of more complex relations between some of these factors. For example, Barnes, Boutwell, Beaver, and Gibson (2013) examined poor parenting practices (spanking, specifically), externalizing problems, and self-regulation in a sample of twins. Their results suggest that shared genetic influences may account for some of the relationship between parenting practices and externalizing problems, as well as between self-regulation and externalizing problems. It is likely that in the future, nuances of the various predictive factors mentioned here (and potentially others not mentioned) will become clearer.

Predictors of Internalizing Problems

Although researchers have been examining predictors of externalizing disorders for many years, historically they have been less focused on internalizing disorders. It does appear that there are some similarities across these clusters of problem areas. Ineffective parenting practices and parental stress/distress during the preschool years may lead to an increased risk of internalizing problem behaviors for children in later years (e.g., Heberle et al., 2015). Parental psychopathology has also been found to be a risk for internalizing, as well as externalizing, problems (e.g., Breaux et al., 2014; Marakovitz, Wagmiller, Mian, Briggs-Gowan,

TABLE 1.3. Predictors of Internalizing Problems in Young Children

Parent characteristics	Child characteristics
Ineffective parenting practices	Difficult temperament
Parental stress	Behaviorally inhibited temperament
Parental psychopathology	Negative emotionality
Low social support	Insecure attachment
	Delayed language
	Demographic variables
	Low socioeconomic status
	Low birthweight
	Low parental education

& Carter, 2011). Social support has been noted to be a protective factor for children, with those with greater supports being less likely to develop internalizing problems at school age even if parenting practices are ineffective (e.g., Heberle et al., 2015).

Child characteristics such as temperament, including behavioral inhibition and negative emotionality, as well as delayed language development, have also been examined as predictors of internalizing problems. Researchers have examined the role of inhibition in predicting future problems. High inhibition in the preschool years has been linked to later internalizing problems (e.g., Hastings et al., 2015; Hirshfeld-Becker et al., 2007; Marakovitz et al., 2011). Negative emotionality in preschool has also been linked to later internalizing problems (e.g., Davis, Votruba-Drzal, & Silk, 2015; Marakovitz et al, 2011; Shaw, Keenan, Vondra, Delliquadri, & Giovannelli, 1997), although this variable may interact with parenting factors; at least one study notes that negative emotionality was a stronger predictor of later internalizing problems when mothers exhibited high levels of parental warmth (Davis et al., 2015). Delayed language in the preschool years has also been linked to internalizing problems in later childhood and early adolescence even when controlling for other variables (e.g., maternal intelligence, SES) that may impact these factors (Bornstein, Hahn, & Suwalsky, 2013). While an insecure attachment style has also been linked to internalizing problems, the relationship is not as strong as that with externalizing problems (e.g., Groh, Roisman, van IJzendoorn, Bakermans-Kranenburg, & Fearon, 2012).

Demographic factors, including lower SES, have also been linked to an increased risk for later internalizing problems (e.g., Carter et al., 2010; Hastings et al., 2015), and this link has been shown to exist in studies within and outside of the United States (e.g., van Oort, vam der Ende, Wadsworth, Verhulst, & Achenbach, 2011). Lower parental education levels have also been linked to an increased risk for internalizing problems in several studies (e.g., Burlaka, Bermann, & Graham-Bermann, 2015; Carter et al., 2010). Specific to the child (rather than family characteristics), low birthweight has been linked to an increased risk of internalizing problems (Bohnert & Breslau, 2008).

CHAPTER SUMMARY/PURPOSE OF THIS BOOK

Social, emotional, and behavioral problems during the early childhood years are clearly a real concern with potentially adverse long-term outcomes. Given that the problems identified during the preschool and kindergarten years put children at an increased risk for later problems, prevention and intervention efforts in the preschool and kindergarten years can be important in mitigating their potential to have long-lasting effects. A number of evidence-based psychosocial treatments support their use with young children or show particular promise for use with this age group. The purpose of this book is to provide a review of, and implementation guidelines for, these evidence-based psychosocial interventions. Clinicians should be able to use the information and materials provided to develop assessment strategies and treatment plans for most of the disorders commonly seen during the preschool and kindergarten years.