CHAPTER 1

Defining Autism Spectrum Disorder in Cognitively Able Adults (Asperger Syndrome)

This chapter introduces the most recent definition and diagnostic criteria for autism spectrum disorder (ASD) and provides the historical context for the *Asperger syndrome* (AS) term that is still used by some. That is followed by a description of how ASD manifests in adulthood and why affected individuals may seek out a psychotherapist. The factors adding to the complexity of the symptom picture in adult ASD are outlined, including differential diagnosis and common myths. To round out the picture of adult ASD, the chapter ends with a discussion of the strengths often seen in these adults and how they may serve to make them particularly responsive to cognitive-behavioral therapy (CBT).

What Is AS and Why Is the Term Still Used?

AS was first recognized in the United States in 1994 when it was introduced as one of the pervasive developmental disorders (PDD) in the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV; American Psychiatric Association, 1994), shortly after it was introduced in the *International Classification of Diseases* (ICD-10; World Health Organization, 1992). Termed *Asperger's disorder* in that volume of DSM (*Asperger syndrome* in ICD), the general features are very similar to the symptoms seen in the longer-known autistic disorder—that is, "impairment in social interaction" and "restricted repetitive patterns of behavior, interests and activities" (p. 77). In contrast to traditional or "classic" definitions of autistic disorder, however, there are no clinically significant delays in cognitive development, language, development of age-appropriate self-help skills, adaptive behavior, or curiosity about the environment. In other words, people with AS are verbal and do not have comorbid intellectual disability (ID), as do many individuals with autism.

Although the concept of AS was new to mental health practitioners in the United States when DSM-IV was published in 1994, it was 50 years old in Europe. Hans Asperger, an Austrian pediatrician, first described a set of features common among a group of his patients in 1944. His German-language manuscript received little attention until 1981, when Lorna Wing connected his descriptions to the cases she was seeing in the United Kingdom (Attwood, 1998; Wing, 1981, 2000). Internationally, there are differing perspectives on the specific criteria to be used when making the diagnosis, but most authors agree that it is on a spectrum with autistic disorder and that it involves severe problems in social perception and behavior that appears in people whose intellectual and language functioning is relatively intact (Attwood, 1998, 2007; Ghaziuddin, 2005; Klin, Volkmar, & Sparrow, 2000; McPartland, Klin, & Volkmar, 2014; Wing, 2000).

Current North American Criteria: DSM-5 and ICD-10

The criticisms of current classification systems for ASD are many and the debates among researchers in the autism field have only intensified since the first edition of this book was published 11 years ago. The most recent controversy, for example, has surrounded the significant changes reflected in the publication of DSM-5 (American Psychiatric Association, 2013); only 19 years after being introduced to the DSM system, the category termed *Asperger's disorder* was removed as a more dimensional system for describing behavioral symptoms and impairment severity was introduced. A single category of autism spectrum disorder is used, with several specifiers allowing the diagnostician to indicate the presence of certain features and to rate severity. The practical implications of this change on any individual vary greatly, depending on the role one plays in the autism community. So, the impact is quite different for each of these players: practitioner, researcher, parent of school-age child, early intervention specialist, special education teacher, young adult with ASD, middle-age adult with ASD, and so on. Because this book is meant to be a clinical manual for practitioners interested in treating cognitively able adults with ASD (AS) and similar conditions, a comprehensive review of the controversies would be outside its scope (for more extensive discussion, see McPartland et al., 2014; Ozonoff, 2012). This section outlines the current diagnostic criteria and highlights the issues that would be relevant to clinical work with adult patients.

Most clinicians serving adults are required to use either DSM-5 or ICD-10 when assigning a diagnosis to a patient. Which system one chooses would depend on the individual circumstances of a case, including the requirements of any third-party payer for the services. For example, many health insurance companies, as well as U.S. government-funded health plans (Medicare, Medicaid) require a clinician to code the treating diagnoses using ICD-10 in order to pay for therapy. On the other hand, adults who are applying for Social Security disability benefits or state-funded vocational assistance may ask a therapist to fill out government forms requiring a DSM diagnosis, though I have observed that such forms have not been updated for DSM-5 (at the time of this writing, many of these forms still ask for DSM-IV classification). Because both systems are in use, clinicians may find themselves referring to the same patient as having ASD or AS interchangeably, depending on the documentation requirements of the service delivery system within which the therapy is being provided. For that reason, a summary of each is presented here.

An abbreviated summary of DSM-5 criteria for ASD is shown in Table 1.1. The reader can refer to DSM-5 (American Psychiatric Association, 2013) for an in-depth description of the symptoms and associated features. Similarly, the diagnostic criteria summary of AS from ICD-10 is presented in Table 1.2, and the reader can find a more detailed description in the primary source (World Health Organization, 1992). Chapter 3 covers the specific assessment approaches that are currently used as best practices for diagnosing ASD in adulthood.

A few points worth noting here in comparing the two systems. First, the two core symptom categories are the same in both systems; affected individuals have *impairments in social communication/social reciprocity,* as well as *restricted, repetitive patterns of behavior and interests*. Second, the two systems differ in that DSM-5 criteria are dimensional while ICD-10 (which is very similar to DSM-IV-TR; American Psychiatric Association, 2000) criteria are categorical. Different manifestations of ASD would be described by *varying severity levels on a scale* in each of the two core symptom areas in DSM-5 (all subjects have the same label, but differ by numbers 1, 2, or 3 assigned on the level of severity scale, with 1 representing mildest and 3 the most severe). Conversely, in the ICD-10 system, different symptom presentations are described by *varying labels* (e.g., subjects would have different labels: autistic disorder vs. AS vs. pervasive developmental disorder not otherwise specified [PDD-NOS]). DSM-5 does require some categorical information in that the clinician is directed to specify the presence or absence of intellectual impairment, as well as the presence or absence of language impairment. However, some flexibility has been built in that it is helpful for clinicians who are diagnosing adults, as the DSM-5 system does allow for a symptom to be counted, whether it appears currently or *by history*. The acknowledgment that symptom presentation may fluctuate across the lifespan is also noted in the third criterion, which describes how some behaviors may be prominent at some points and masked by various factors at other points in a person's life. This is particularly important for clinicians who are working with people who have been alive for several decades!

The remainder of this section is used to comment on two other general issues that can arise with adult patients because of these ever-shifting diagnostic terms. The first is that there have been significant and frequent changes in how ASD has been defined within the lifetimes of adult patients—more so for older adults. Because of this, clinicians commonly see adults who have had *long histories of misdiagnosis* or confusing labels that often did not quite fit the problems they were experiencing. In both the DSM and ICD systems used before the early 1990s, clinicians had only *two* categories to choose from for patients presenting with autism symptoms: autistic disorder and PDD-NOS—as already mentioned, AS did not exist. Then, when AS was introduced, it was presented as one of five PDDs; the umbrella expanded and more verbal and cognitively able people were identified. Now, with the new DSM system, clinicians have *one* category, but more flexibility in applying it, as there is a more dimensional system of symptom identification. The sort of "flip-flopping" of terms over the last 30 years has adversely affected the quality of treatment for adult patients, and clinicians need to be sensitive to the stress this has caused for many.

The second issue relates to concerns that both patients and professionals have about people with AS potentially *losing their identity or being denied access to services* because the AS category does not appear in DSM-5. These are valid concerns and have been the subject of many sessions with my patients as well as conversations with my colleagues.

TABLE 1.1. DSM-5 Criteria for ASD

A. Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following, currently or by history (examples are illustrative, not exhaustive; see text):

1. Deficits in social–emotional reciprocity, ranging, for example, from abnormal social approach and failure of normal back-and-forth conversation; to reduced sharing of interests, emotions, or affect; to failure to initiate or respond to social interactions.
2. Deficits in nonverbal communicative behaviors used for social interaction, ranging, for example, from poorly integrated verbal and nonverbal communication; to abnormalities in eye contact and body language or deficits in understanding and use of gestures; to a total lack of facial expressions and nonverbal communication.
3. Deficits in developing, maintaining, and understanding relationships, ranging, for example, from difficulties adjusting behavior to suit various social contexts; to difficulties in sharing imaginative play or in making friends; to absence of interest in peers.

Specify current severity:

Severity is based on social communication impairments and restricted repetitive patterns of behavior (see Table 2 [on page 52 of DSM-5]).

B. Restricted, repetitive patterns of behavior, interests, or activities, as manifested by at least two of the following, currently or by history (examples are illustrative, not exhaustive; see text):

1. Stereotyped or repetitive motor movements, use of objects, or speech (e.g., simple motor stereotypies, lining up toys or flipping objects, echolalia, idiosyncratic phrases).
2. Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behavior (e.g., extreme distress at small changes, difficulties with transitions, rigid thinking patterns, greeting rituals, need to take same route or eat same food every day).
3. Highly restricted, fixated interests that are abnormal in intensity or focus (e.g., strong attachment to or preoccupation with unusual objects, excessively circumscribed or perseverative interests).
4. Hyper- or hyporeactivity to sensory input or unusual interest in sensory aspects of the environment (e.g., apparent indifference to pain/temperature, adverse response to specific sounds or textures, excessive smelling or touching of objects, visual fascination with lights or movement).

Specify current severity:

Severity is based on social communication impairments and restricted, repetitive patterns of behavior (see Table 2 [on page 52 of DSM-5]).

C. Symptoms must be present in the early developmental period (but may not become fully manifest until social demands exceed limited capacities, or may be masked by learned strategies in later life).

D. Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning.

E. These disturbances are not better explained by intellectual disability (intellectual developmental disorder) or global developmental delay. Intellectual disability and autism spectrum disorder frequently co-occur; to make comorbid diagnoses of autism spectrum disorder and intellectual disability, social communication should be below that expected for general developmental level.

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TABLE 1.2. Summary of ICD-10 Criteria for Asperger's Syndrome

1. *Lack of clinically significant delay in language or cognitive development; self-help skills and adaptive behavior during first 3 years appear normal.*
2. *Abnormalities in reciprocal social interaction*—at least one of the following:
   - Inadequate use of eye-to-eye gaze, facial expression, body posture, and gesture to regulate social interactions
   - Lack of peer relationships involving sharing of interests, activities, and emotions
   - Lack of social–emotional reciprocity (e.g., impaired response to the emotions of others; failure to modulate behavior according to context; weak integration of social, emotional, and communicative behaviors)
3. *Restricted, repetitive, stereotyped patterns of behavior, interests, or activities*—at least two of the following:
   - Restricted interests, abnormal in terms of intensity, content, circumscribed nature, or focus
   - Compulsive adherence to nonfunctional routines or rituals
   - Stereotyped or repetitive motor movements (e.g., hand or finger flapping, twisting, or whole-body movements)
   - Preoccupation with parts of objects or nonfunctional aspects of play materials
   - Distress appears with small changes in the environment
4. *Not attributable to other pervasive developmental disorders or mental disorders (e.g., schizotypal, schizophrenia, reactive and disinhibited attachment disorder, obsessional panic disorder, or obsessive–compulsive disorder).*

Note. Adapted with permission from *The ICD-10 Classification of Mental and Behavioural Disorders: Diagnostic Criteria for Research* (World Health Organization, 1993).

I am happy to share that I have been reassured by several factors in the 4 years that have passed since the publication of DSM-5 and the time of this writing. The first was already mentioned: AS still appears in ICD-10, a system that therapists are often called to use by third-party payers. Inspection of the criteria shows that the description is very similar to that of DSM-IV-defined AS. For situations where DSM-5 is required or chosen by a therapist, there is a note that appears in that volume that says, "Individuals with a well-established DMS-IV diagnosis of . . . Asperger's disorder . . . should be given the diagnosis of autism spectrum disorder" (American Psychiatric Association, 2013, p. 51). In other words, a provision is there to ensure that any previously diagnosed person will not be left without an ASD diagnosis, as some patients of mine had feared. My confidence that no legitimate case of AS will be excluded from the new ASD definition has some empirical support, as well. Wilson and colleagues (2013) used a sample of 150 adults in the United Kingdom who met ICD-10 criteria for an ASD and compared the diagnostic outcomes of each case using DSM-IV-TR and DSM-5. By taking full advantage of the flexibility that is offered in the DSM-5 description (symptoms can be observed currently or by history) and using the least stringent coding methods regarding symptoms that may have been present historically, 98% of the subjects who met ICD-10 criteria for AS also met DSM-5 criteria for ASD. Using a less stringent method is often necessary when diagnosing adults, as it is not always possible to get all the details of their early developmental histories.

As mentioned previously, the struggles we face in trying to standardize our language for describing the complexities of ASD are likely to continue for decades to come. In the meantime, readers are among a growing set of practitioners who are trying

to help these adults every day as they appear in psychotherapy offices and clinics across the country. No matter which specific terms are used to define the social and behavioral problems seen in the adult patients described in this book, I encourage the use of an individualized approach to treatment plan design and intervention. I see no reason why we cannot continue to do that even though our past, present, and future classification systems are imperfect. Furthermore, while Asperger's disorder no longer appears in DSM, it cannot be erased from the collective consciousness of our community. In the United States, it has become a "household word" with which many people have become quite familiar, as there are numerous fictional characters that have appeared in countless television shows and movies since the first edition of this book. Patients who have come to identify strongly with the *Asperger* term can be assured that it will not disappear just because of DSM-5.

How Does ASD Present in Adulthood?

The purpose of this section is to familiarize readers with the various ways in which ASD may present in adults who are seeking help in treatment settings. The prevalence of such cases in the general population is useful to know so that clinicians have a sense of how frequently a person with this diagnosis may show up in practice settings where adults are served. Unfortunately, there is a paucity of data on the epidemiology of adult ASD. Prevalence studies are clouded by inconsistencies in how ASD is classified, and most large-scale studies are based on child samples. We can only make inferences about the U.S. population of adults with ASD by looking at child data on all the ASD and adult prevalence reports from outside the United States. The most recent estimate published by Christensen and colleagues (2016) in the United States for all ASD was 14.6 per 1,000 (1 in 68) children across a multisite study conducted in 2012. Of the ASD sample, 10% met criteria for AS (DSM-IV-TR) specifically, which converts to about 1.5 per 1,000 (1 in 680). When the absence of ID was used as the defining factor, 68% of the ASD sample were represented, which converts to 4 per 1,000 (1 in 250) children having an ASD without ID (IQ ≥ 70). In a child study conducted in Finland that focused on AS specifically (Mattila et al., 2007), the rates were estimated to be 2.9 per 1,000 (1 in 344) when ICD-10 criteria were used. For adult ASD, the only recent comprehensive study was conducted in the United Kingdom by Brugha and colleagues (2011) and estimated that in the populations of adults living in the community, approximately 9.8 per 1,000 meet criteria for an ASD in general, or about 1 in 102. Subtype data were not available for this sample. Because we know that children with ASD do not just "grow out of it," we can assume from these data, as variable as the estimated rates are, that there is a fair number of adults living in our communities with these issues who do not have ID, but do have enough daily problems to compel them to appear in therapist offices for help. (see Maddox & Gaus, 2018, for a more extensive discussion).

Gender/Sex

Our access to an accurate ratio of male-to-female cases is also limited because the classification problems mentioned above are compounded by questions about gender differences in symptom manifestation and identification biases (Koenig & Tsatsanis,

2005; Kreiser & White, 2014; Lai, Baron-Cohen, & Buxbaum, 2015; Wilson et al., 2016). Generally speaking, all epidemiological studies have shown a higher incidence of male cases of ASD compared to female cases. The specific ratios have varied greatly across studies, however, from as high as 16:1 to as low as 2:1 (as reviewed by Kreiser & White, 2014; Lai et al., 2015). Recent child studies conducted by Christensen and colleagues (2016) found an overall ratio of boys to girls to be 4.5:1 for all ASD. Most relevant to the subject of this book was a study conducted in the United Kingdom with adults not previously diagnosed with ASD—in the investigators' analysis of people who met criteria for ASD without co-occurring ID, the male-to-female ratio was found to be 3.4:1 (Wilson et al., 2016).

Many researchers are suggesting that the gender differences cited above do not reflect true prevalence and that the male-to-female ratios reported would not be as high if several problems were to be addressed (Kreiser & White, 2014; Lai et al., 2015; Wilson et al., 2016). The theoretical and practical explanations for exaggerated prevalence differences involve many factors, but all surround the idea that *truly affected females are underrepresented in study samples,* not that males are overrepresented. Highlighting the most recent literature on this, Kreiser and White (2014) review the biogenetic explanatory models that have been offered by autism researchers for the gender/sex differences observed in ASD, including the brain differences model (e.g., assuming differences in brain structure, brain circuitry, and hormones account for different prevalence rates), greater variability model (e.g., assuming males have a genetic vulnerability to develop ASD), and liability/threshold model (assuming females have built-in compensatory mechanisms that cause the threshold for visible impairment to be higher than in males). These authors go on to suggest that while biogenetic factors may account for some of the variance observed in the male-to-female prevalence rates, there are likely social and cultural factors that inflate the disparity between male and female incidence reports. The two main categories of factors are (1) biases in research methods and diagnostic criteria and (2) nonbiological influences (sociocultural, familial, intrapersonal) on the unique manifestation of symptoms in females that cause their presence to be missed or downplayed by others.

Biases in epidemiological research, for example, lie in the common method of using convenience samples—studying cases that have already appeared in clinical settings. Because boys with ASD are more likely to be referred for services than girls (due to more disruptive and aggressive manifestation of ASD symptoms), females are underrepresented in these studies. Moreover, while both genders are experiencing the same core problems, the different phenotypical expression has biased our diagnostic criteria; the way we define and describe the phenomenon has been more heavily influenced by male cases. In a reciprocal bias process, the samples that inform our diagnostic system design have been mostly male, so the male manifestation has shaped how we define the disorder in general, further causing the female variation to be left out of the diagnostic system, further causing females to be left out of research because they do not meet the criteria, further causing the ongoing development and modification of diagnostic criteria to be based on biased samples—and on and on.

Keiser and White (2014) provide a schema for understanding the way biogenetic factors of female ASD develop into a unique manifestation of symptoms because of a complex array of gender-specific behavioral norms/expectations inherent in sociocultural systems (from school, community, ethnic group), familial systems (from home),

and intrapersonal systems (from the individual's motivational, emotional, cognitive processes during development of socialization behaviors). All of these factors interplay to lead females with ASD to be more likely to develop compensatory strategies that mask their deficits enough to "get by" in the eyes of others, but which are not conducive to healthy social or emotional development. It has been reported that these girls are more likely to develop passive personalities, struggle with more internalizing problems, and be more prone to comorbid depression.

For the present purposes, suffice it to say that clinicians who are treating adults may see one woman with ASD for every two to three men, keeping in mind that the ASD symptoms may look different and be compounded by comorbid conditions.

Race/Ethnicity

Epidemiological studies in children have consistently shown disparities in the prevalence rates of ASD between various racial and ethnic groups (Durkin et al., 2017). The general trend noted in both U.S. and European studies is that ASD rates are higher within white-majority groups and lower within ethnic-minority groups (Begeer, El Bouk, Boussaid, Terwogt, & Koot, 2009; Christensen et al., 2016). The most recent Christensen and colleagues (2016) multisite study of 8-year-old children showed that the rates of ASD were highest in non-Hispanic white children (15.5 per 1,000), a significant difference compared to non-Hispanic black children (13.2 per 1,000), Asian/Pacific Islander children (11.3 per 1,000), and Hispanic children (10.1 per 1,000).

Research that will help us understand the causes of these differences and the true prevalence of ASD in ethnic minorities is only in its infancy. Durkin and colleagues (2017) explored the hypothesis that socioeconomic status (SES) accounts for these differences. Considering that people in higher-SES groups would have more access to information, resources, and quality medical care, a child with ASD is more likely to be identified and treated than a child who may be struggling with ASD within a lower-SES family and community. Durkin and colleagues found that when they statistically controlled the SES factors, disparities between ethnic groups still showed up, suggesting that it is not that simple. While SES undoubtedly has some influence, other factors that are being discussed and explored in the field are biased assessment instruments (Harrison, Long, Tommet, & Jones, 2017), protective factors associated with some ethnic communities (Palmer, Walker, Mandell, Bayles, & Miller, 2010; Ratto, Anthony, et al., 2016), culturally influenced variations in parental perception, and description of child behavior/symptoms (Ratto, Reznick, & Turner-Brown, 2016).

Though we have almost no research to rely on, clinicians treating adult patients from ethnic-minority groups should consider that these individuals may have had unique experiences with their ASD identification and diagnosis as compared to non-Hispanic white patients.

Age and Cohort Issues

Since the first introduction of AS into North American classification systems, the attention paid to it in research and practice has primarily focused on children. It is a developmental disorder (DD) involving problems that usually first appear in children, so it makes obvious sense to channel resources into understanding early developmental

processes and to intervene in a proactive way early in life. However, people born before the mid-1970s who currently meet criteria for AS or ASD without ID were already adults before the syndrome was made known in 1994 to the mental health community in the United States. They are at a particular disadvantage because their problems were not diagnosed and treated properly when they were children, yet they need effective therapeutic supports as much as today's newly diagnosed youngsters. When these individuals were children, they presented differently from their counterparts with the more familiar or "classic" autistic disorder of the 1950s, 1960s, and 1970s, the latter being mostly nonverbal, unresponsive to other people, and having ID. The more cognitively able children with ASD had average to superior intelligence and advanced verbal skills, were often academically successful, and had intense interests in certain topics (e.g., astronomy, insects, trains). This presentation (sometimes referred to as the "little professor syndrome") may have been endearing to parents and some teachers, but these children were typically disliked by their peers. They were plagued by anxiety, subject to anger outbursts, and sometimes classified in the education system as "emotionally disturbed," but in those earlier decades less likely to have been identified as having a DD. In fact, their profiles did not clearly fit any diagnostic category during the 40-year span between the 1950s and 1990s in the U.S. classification system. They have therefore lived most of their lives with an array of problems but without a diagnosis, or worse, with the wrong diagnosis. They have missed out on the benefits that educational and therapeutic programs designed to meet their needs would have brought them, and therefore are at a greater risk for problems in adulthood.

As mentioned, research studies on adults have not been nearly as many as those on children. Looking at the numbers of studies done on ASD in general, Cottle, McMahon, and Farley (2016) illustrated how the trend of growth in research has increased dramatically over the past two decades, but the number of studies done on adult ASD has not grown at nearly the same rate. Worse yet, there has been almost no focus on cohort effects or the needs of people with ASD in mid to later life (Wright & Wadsworth, 2016). For example, older adults who rely heavily on their parents are facing major losses of support as their caregivers age and die. Others are themselves becoming caregivers as their parents lose independence and need more help from them.

As an informal observation, I have noticed over the past 10 years an increase of attention by advocacy and support communities on the needs of adults, which has been pleasing. At the same time, I have been disappointed that there has been a bias toward offering help and resources to *young* adults without much mention of the needs of people who are 30 years old and up. To make a point in a discussion published elsewhere (Gaus, 2016), I sampled my caseload by looking at all the clinical contacts I had with patients meeting criteria for AS or ASD without ID within a 2-year period. Of the 68 cases, the age range was 19–77 years. Less than half of these cases were young adults (29, or 43%, were under 30). Of the 39 cases (57% of my cases) that were 30 years old or more, 24 (35% of the whole ASD caseload) were 40 or older, and 15 of those (22% of the whole ASD caseload) were 50 or older. While this is only a rough sketch of how ages are represented in one clinician's caseload in a specific setting and geographical region, it illustrates the fact that adults of all ages can appear in clinicians' offices.

Different age groups may present with different types of problems, partly because of cohort effects (e.g., inadequate support and education for earlier-born cohorts, technology influences on later-born cohorts) and partly because the types of stressors

patients contend with are different depending on life stage (e.g., pressures on a 24-year-old are different from those on a 50-year-old). The case examples in this book illustrate some of these issues. To conclude this section, clinicians serving the adult ASD population can expect to see a heterogeneous collection of problems given the wide age range across the adult lifespan.

Presenting Problems

Psychotherapy is becoming more widely perceived as a viable treatment modality for individuals with ASD (Attwood, 2007; Gaus, 2011; Jacobsen, 2003; Koenig & Levine, 2011; Volkmar, Klin, & McPartland, 2014). To illustrate the multitude of symptom profiles a therapist may encounter and the wide variety of reasons an adult may seek treatment, I describe several case examples of patients as they presented at their intakes in my practice. These individuals are introduced before the theoretical and empirically supported explanations for the adult ASD symptom picture are presented, as a way to simulate the order of events in a practical setting. After all, a therapist usually meets and talks with a person who has a name and face *before* conceptualizing the reasons behind his or her problems. These individuals were selected because their symptom presentations are heterogeneous, and their primary complaints are representative of the common difficulties a therapist will observe in this population. Each case description is followed by a brief discussion of how it illustrates a unique manifestation of ASD. Please keep in mind that a *full evaluation was necessary for each before confirmation of the diagnosis could be made*; the information contained in these summaries is insufficient to diagnose ASD with certainty. The purpose of this section is to familiarize the reader with some of the clues that can appear during an intake. Details on conducting a comprehensive assessment, obtaining a diagnosis, and providing treatment for individuals with ASD are provided later in the book. The descriptions begin with Joe, my very first encounter with AS.

Joe: Severe Regression in Functioning Triggered by Stressful Life Event

Joe is a 55-year-old single Latin American man who was referred to the therapist by his brother, who had become concerned about him because Joe had been suddenly evicted from his apartment. This turn of events raised questions about his mental status and ability to care for himself. His brother had recently read an article about AS and connected the description to Joe.

Joe has a master's degree in engineering and has worked in that field in one company for more than 25 years. He has lived alone in the same apartment in New York City for the past 18 years without incident. His eviction was a shock to his family because they had seen no warning signs. After checking into the reason for the eviction, his brother found out that Joe's apartment building had been sold to a new management company many months before. Because the change in management required Joe to write and send his rent check to a new place, he just stopped paying. Numerous notices and warnings that came in the mail were ignored by Joe, who simply stacked them neatly in a drawer.

His brother reported that Joe had always been a "loner," "a little odd," and "rigid." However, he was able to succeed in college and graduate school, get and keep a job, and live on his own without assistance. His siblings were in the habit of checking on him by phone on a weekly basis, although Joe never initiated contact with them. He never complained of any distress, there was no history of psychiatric

illness, and no problems at work; he always received positive performance reviews from his supervisors. His family sometimes had minor concerns that his life was "boring" because he carried out exactly the same routine every day and had no friends or girlfriends. He did have a passionate interest in wild birds and spent his free time pursuing the subject by going to the library or watching documentaries on television. Because he never complained, the family assumed he was content.

At intake, Joe demonstrated flat affect, spoke in a monotone, and avoided eye contact. However, he articulately described feeling distraught about the incident, expressing shame and anger at himself for having handled the situation so poorly. He reported that he had felt very nervous by the change in building management companies, and this nervousness made him avoid writing the rent checks. When he began receiving the warning notices, he became so frightened that he did not know what to do and was afraid to tell his family about the problem. The worse the problem got, the more he avoided taking steps to address it.

Joe's intake description highlights some of the DSM-5 symptoms for ASD without ID (and ICD-10 symptoms for AS), presented earlier in the chapter. His "inflexible adherence to routines" could be seen in his total inability to shift his rent-paying routine and to practice adaptive problem solving when he received eviction warnings. Joe also demonstrated "restricted, fixated interests": his leisure activities focused solely on wild birds. In the social communication domain, he demonstrated a "deficit in developing, maintaining and understanding relationships" and "deficits in social–emotional reciprocity" in the way he interacted with his family as well as the therapist (American Psychiatric Association, 2013, p. 50).

Joe's case illustrates one common reason cognitively able adults with ASD are referred to psychotherapy: *a regression in functioning triggered by a stressful life event* or major change in circumstances. This also relates to issues commonly seen in *older adults*. Like Joe, many adults with ASD can achieve a high level of education and function adequately in a predictable, structured, and restricted set of circumstances. However, they may demonstrate *poor judgment* and *lack of problem-solving ability* when faced with an unexpected change. In lay terms, family members may complain that the individual seems to have "no common sense." A stressful shift in circumstances may occur in the individual's environment, as it did in Joe's case; other times a natural developmental change, such as the transition from adolescence to adulthood, can trigger the regression. The next case, Lorraine, is an example of this.

Lorraine: Frustration over Lack of Independence

Lorraine is a 22-year-old white Catholic woman who attends a community college on a part-time basis and lives with her mother, father, and one sister. She was diagnosed with PDD-NOS, as per DSM-III-R at the time (DSM-III-R; American Psychiatric Association, 1987), when she was in preschool, but a psychiatrist had more recently changed her diagnosis to AS (as per DSM-IV-TR). Lorraine was referred to therapy by her parents, who had growing concerns about her low frustration tolerance and anger outbursts. She agreed to meet the therapist because she wanted to learn to be more assertive and less dependent on her parents.

Lorraine's frustration had been increasing around her schoolwork. For all college classes she has taken to date, she has had to rely on a *scribe,* a person assigned to take notes in class and take dictation from her on written assignments. This

special education accommodation was necessary because she had fine motor problems that significantly impaired her handwriting capacity. In recent months, her mother was acting as the scribe because her school had not been able to find one for her. This level of interaction was increasing the tension between them; Lorraine would often end study sessions by screaming, and during one episode she pinched her mother. She frequently stated that she was "tired of needing help" and concerned that the college credits earned thus far were not legitimate but really "belong to my mother."

Lorraine's parents reported that she had significant "autistic signs" since preschool, including unusual use of language, social detachment, severe tantrums, distress with changes, and hyperactivity. She steadily improved as she developed, and her parents attribute her success to the special education supports she received, such as intensive speech–language therapy. They have always considered her education a high priority, and they often had to legally challenge their school district for specialized services that were not readily offered to Lorraine. Her parents personally funded additional supports outside of school, most importantly by enrolling her in a therapeutic horseback riding program when she was 6 years old. Not only did this activity help her develop gross motor skills, ability to focus, and self-confidence, but she enjoyed it more than any other. As an adolescent, she began to ride in competitions, and at the time of intake, had been the sole owner of a horse for 3 years.

Lorraine's intake took place across two sessions. She came to the first with her parents and chose to have them remain with her for the entire session. Lorraine presented as a pretty woman who was well groomed and dressed neatly in an athletic outfit. She made eye contact when she shook the therapist's hand, but avoided it for the rest of the session, and her affect appeared consistently flat. Lorraine played a passive role as she looked to her parents to answer many of the therapist's questions. When she returned for a second interview by herself, her affect and expressions were as flat as before. She spoke very slowly with a low volume but clear articulation. She did not look at the therapist and there was a long delay between each question and her answer, but she appeared to carefully consider each one, and her answers were appropriately related. She reported that she felt appreciative of the support her parents had given her over the years but frustrated that she was still so reliant on them. She was in a 1-year-long relationship with a boyfriend (whom she described as "on the autism spectrum, too") and was enjoying the time spent with him outside of her parents' home. She wanted therapy to help her become more independent and more "in control" of her anger because her "yelling" was starting to bother her boyfriend. Throughout the session she looked down, as she sat with one foot on her knee and repeatedly ran her hand back and forth over the tread on the bottom of her sneaker. Twice during the interview, she directed the therapist's attention to the shoe and pointed out all of the special features in the design. She was slow to return to the topic when the therapist redirected her because she was intent on describing the sneaker, its unique qualities, and where it was manufactured. As she was exiting the office at the end of the session, she suddenly turned around and hugged the therapist, but with a flat facial expression and no eye contact.

Although Lorraine's parent-reported history indicated that she had more severe problems with social interaction and behavior as a child, she continued to demonstrate

clinically significant symptoms of ASD (DSM-5 defined) as an adult. Some of the symptoms that were present in her current life, as per her and the parents' report, were observable during the intake sessions. Her poor eye contact and flat affect were examples of "deficits in nonverbal communicative behaviors used for social interaction." The delayed responses to the therapist's questions, difficulty returning to the topic when prompted, and the spontaneous hug (mood incongruent and socially out of context) were examples of "deficits in social–emotional reciprocity." Her intense focus on the details of her sneakers was an example of "preoccupation with unusual objects" as well as "unusual interest in sensory aspects of the environment" (American Psychiatric Association, 2013, p. 50). Poor handwriting skills represented motor coordination problems that are commonly associated features of ASD.

Many young adults with ASD share Lorraine's *frustration over lack of independence*. Their symptoms interfere with the ability to achieve occupational and financial independence, so they must rely on others to complete many activities of daily living. Young adulthood can be a particularly painful time for individuals with ASD and their families because the transition brings about changes that highlight the individual's disability. Typically developing people begin to take steps to leave the family home and pursue an occupation during the late teens and early 20s. Individuals with ASD who have had academic success in the structure of a high school environment, with or without special education supports, are often presumed to be ready for college or work at the same point as their typical peers. However, the changes in environment, schedule, and task demands that come with campus or work life often prove too drastic for individuals with ASD. When they find themselves struggling with tasks that they assumed would come easy, they and their families suffer confusion, disappointment, and frustration.

A different type of life-stage transition problem is illustrated in the next case. Carl is an older adult whose symptoms became most apparent only after the death of his mother.

Carl: Later-Life Diagnosis Prompted by Increased Support Needs

Carl is a 62-year-old single white man who lives alone in a house that he owns. He is not and never has been employed. He was referred to therapy by his psychiatrist following an incident in which he had threatened an in-home visiting nurse by pointing scissors at her. It was hoped that CBT may be helpful to address an increase in angry outbursts and other daily living problems.

Carl had been diagnosed with AS at age 59 (as per DSM-IV-TR) as part of an assessment of functioning completed for a guardianship evaluation. His IQ falls within the average range, though he has significant deficits in adaptive behavior, especially in the domains of health and safety, leisure, self-direction, and social functioning. He has cerebral palsy, which is secondary to congenital hydrocephalus. This causes him to walk with a significant limp, have a need to wear orthopedic shoes, and to have limited use of his right arm and hand. He also has diabetes, which is controlled by oral medication and diet.

Carl's mother had died about 12 years before. He has no family living nearby, but his cousin who lives in a different state is his legal guardian. She manages most of his affairs remotely by maintaining daily phone calls and making quarterly visits. He has a visiting nurse service, with one nurse making monthly visits, and daily assistance from a home health aide. Carl's cousin had applied for legal

guardianship approximately 3 years prior, after Carl's dire circumstances were brought to her attention. She was contacted because she was Carl's only living relative when his house was about to be seized due to a large debt of back property taxes. She had not been involved in Carl's life because she lived so far away, but came for a visit when she learned of this urgent situation. What she found was that the house was in horrendous condition because Carl had been engaging in severe hoarding behaviors for close to 9 years, since his mother had passed away. He was not caring for the property or for himself, as he was also found to be in very poor health. At this point, it became clear that Carl's mother, who had cared for him his whole life, had been essential in compensating for his disabilities. When she died, no one knew that Carl had such deficits in independent living skills because he knew just enough to get by. Because he never had visitors, no one knew how poorly he was living. Carl was fortunate to have his cousin because she got right to work on helping him to stay in his house and improve his lifestyle. She and her husband took on the task of getting the house cleaned, obtaining guardianship, and bringing in the visiting nurse service to help him with his daily needs. Significant improvements were made in his life in a relatively short period of time. At the time of intake, he had already been enrolled in state-funded case management services for developmentally disabled adults and had been assigned a case manager (a.k.a., service coordinator). In addition, his case had ongoing monitoring of a surrogate court because he was not his own guardian, but was living on his own.

In the initial interview, Carl was pleasant and used humor to engage with the therapist. His jokes involved a lot of puns and plays on words. He elaborated on his lifelong hobby, which is learning about the work of the famous jeweler Fabergé. It was obvious that he had an elaborate knowledge base about the artist's life and pieces. He reported that his biggest problem was the nurse who visited him every month. He said she was pushy and nosy and he wished she would stop coming. He seemed to have a positive relationship with his cousin and the home health aide. He moved very slowly and at times appeared to be in pain (winced when he moved his leg), though he denied having any physical discomfort. He was very interested in the therapist's resident cat and dog, and told several stories about pets he had owned throughout his life. He repeated each story more than once and was not responsive to the therapist's nonverbal as well as verbal redirection attempts. At times he would say, "I know I told this story already . . . ," but would continue to tell it again with the exact same phrases and jokes as the previous time. Carl's cousin was able to send ahead summaries of his history, and also to be interviewed as part of the intake. Her most immediate concerns were around the increase in frequency of angry outbursts, overspending/compulsive purchasing of lottery tickets, and ongoing procrastination on self-care and housekeeping tasks.

Carl's symptoms and behavior during the initial interview illustrate several DSM-5-defined criteria for ASD without ID (or ICD-10-defined AS). Across his life, he failed to make his own friends or progress in "developing, maintaining, and understanding relationships." His perseverative storytelling style demonstrated both "deficits in social–emotional reciprocity" and "deficits in nonverbal communicative behaviors." His lifelong focus on Fabergé illustrates "highly restricted, fixated interests." In addition, Carl's compulsive lottery-ticket purchases would need to be explored further as a possible ASD symptom (e.g., ritualized patterns of behavior) and his denial of pain,

despite wincing during the interview (also requiring further assessment), may be a symptom of hyporeactivity to sensory input as "apparent indifference to pain" (American Psychiatric Association, 2013, p. 50).

Carl's case illustrates several common problems faced by adults with ASD in *later life*. His access to professional supports was deferred for many years, as his mother ensured that his needs were met, which allowed him to live through most of his adult life in the community where he grew up. It was not until she was gone that his independent living skill deficits became problematic for him, but not immediately enough to prevent a decline in the condition of his home and personal health. Similar to Joe's case that was presented earlier, a fiscal crisis brought the aid of a family member and ultimately, professionals. Late diagnosis was a central part of Carl's story, as it is in the next case of Rachel.

Rachel: Late Diagnosis After a Long History of Misdiagnoses

Rachel is a 36-year-old single white woman who has a BA in English literature, is unemployed, and lives with her mother. She was referred to therapy as a result of a comprehensive psychological evaluation during which she was diagnosed for the first time with AS (as per DSM-IV-TR). The evaluation was completed at an autism specialty center only 3 weeks before intake, and she was looking for CBT in order to understand and come to terms with her new diagnosis.

Rachel reported a strong sense of relief at her diagnosis, as she had a long history of other diagnoses, none of which led to any effective treatment (e.g., obsessive–compulsive disorder [OCD], bipolar disorder, social phobia, schizophrenia). Her own research had led to the identification of AS and she self-referred to the diagnostic evaluation. Along with relief and a sense of vindication for her long-held belief that she had been mislabeled by educators and clinicians, she was also struggling with anger and sadness over not getting proper help much earlier in her life. Confusion over setting life goals and communicating her wishes to her mother were the most immediate stressors she wanted to address in therapy.

Information about Rachel's history came from her, her mother, and the report that generated from her recent evaluation. She had lifelong problems with anxiety, social relationships, behavioral rigidity, and sensory sensitivity, evidenced as early as 2 years of age. Verbal behavior fluctuated between being overly talkative to being almost nonverbal. She became highly upset when routines would change and would cling desperately to her own established schedules and rituals. Though she performed well in many academic subjects, she was very anxious about going to school and even went through a period of school refusal during middle school. Labeled by various family members as "difficult," "attention seeking," and "a drama queen," Rachel reported feeling misunderstood by most people. She had no siblings and her parents divorced when she was still a child. She stayed with her mother, who has always been a strong source of support. She was successful and reported feeling happy at times during college, once she found a niche with a major she liked and professors she trusted. The years after graduating were marked by frequent job changes, living situations, unstable relationships, and multiple major depressive episodes. Finally, when she was in her early 30s, Rachel moved back in with her mother and withdrew from all activities outside the home. It was during that period that she was researching possible causes for her sensory sensitivity to certain smells and stumbled on a description of AS.

Rachel came to the intake interview dressed in dark-colored, loose-fitting sweats. She sat in a slouched position and made only fleeting eye contact. Though she initially appeared sullen, her speech was rapid and energized, at times even pressured. Her animated verbal behavior was not matched by any nonverbal signs; her lack of gestures or body movements seemed incongruent with her speech. Her answers to questions were on-topic and relevant, but highly detailed. Her mother joined part of the session. Rachel did use more eye contact and nonverbal communication with her. While the two agreed that they argue quite often about Rachel's current lifestyle and seeming lack of goals, they appeared to have a close and caring relationship.

Rachel's evaluation took place when DSM-IV-TR was still in use and she clearly met criteria for AS. If we use DSM-5 terminology, she meets criteria for ASD without ID. Examples of how her symptoms were shown through her history, as well as in the interview, include deficits in social communication, such as "reduced sharing of interests," "poorly integrated verbal and nonverbal communication," and problems with "developing, maintaining, and understanding relationships." In the restricted and repetitive patterns of behavior domain, she showed "inflexible adherence to routine" in childhood as well as adulthood. Finally, one of her most prominent sets of daily living problems surround "hypersensitivity to sensory input," particularly tactile (driving her clothing choices), olfactory, and auditory (American Psychiatric Association, 2013, p. 50).

Rachel's case of *late diagnosis after a long history of misdiagnoses* is a perfect illustration of the consequences faced by bright and verbal girls whose ASD was not identified properly in childhood. This is an example of a *female with true ASD* who is left out of the research on clinic samples, as I discussed in an earlier section of this chapter. While Rachel's determination to find the right help for herself is a sign of one of her many strengths, she suffered unnecessarily for many years. The lack of guidance she received caused a long delay in mapping out a viable career path for herself, as she felt for many years that her talents and abilities were being underutilized. Rachel's job instability and significant *underemployment* is one of the most pervasive problems faced by adults with ASD. The next case, Rose, is another illustration of this problem.

Rose: Frustration over Occupational Problems

Rose is a 41-year-old single Irish American Catholic woman who was referred to therapy by her case manager because of a recent increase in angry outbursts and anxiety. Rose also has a long history of socially inappropriate behavior that has interfered with her occupational functioning. She lives with five other people in a group home for adults with developmental disabilities. The most recent psychological evaluation completed for Rose listed her diagnosis as PDD-NOS (as per DSM-IV-TR). She is unemployed and attends a full-time prevocational training program.

Rose's expressions of anger, which involve frequent episodes of screaming and occasionally include physical aggression toward others (shoving, punching), began approximately 6 months ago, soon after she was asked to resign from her job. She was employed in the clothing fitting room of a department store for 1 year. Her work was overseen by a job coach who periodically visited the store, interfaced with the employer, and provided her with guidance and feedback. Her performance was hindered by a number of repetitive behaviors about which her employer expressed concern. She tended to leave her work area without permission, walk around the

store conversing with coworkers and customers, often using intrusive methods to initiate conversations (e.g., loudly interrupting, asking personal questions). Despite the support and direction provided by her job coach around these issues, she continued to demonstrate the interfering behaviors, and the employer asked her to resign. This was the second retail job she had held within the past 5 years; she had previously been asked to resign after 2 years in another department store for similar reasons. Because of this pattern, she was not set up with another job. Instead, Rose was referred to a prevocational day program, with the goal of teaching her social skills and strategies for impulse control. She has been attending regularly for the past 6 months, but expresses great dissatisfaction with the program and wishes to return to work.

Rose's mother reported that Rose had developmental problems since infancy, including swallowing problems, difficulty reciprocating affection, delayed language development, problems developing peer relationships, and difficulty with changes in routines or schedules. She was diagnosed with "minimal brain damage" by a neurologist and later classified with "mental retardation" by her school district because she was placed in special education when she entered kindergarten. Her education through 12th grade was marked by numerous changes in school and classroom settings because she did not appear to "fit in" anywhere. For example, she functioned at a higher intellectual level than her peers when placed in classes for students with ID, and she would become easily bored by the work. When placed in classes for "emotionally disturbed" students, she was given academic work more suited to her cognitive ability, but her lack of social skills contributed to poor relationships with peers and she was constantly "picked on." After graduating from high school, she continued to live with her parents and attended various vocational training programs, succeeding occasionally at temporary or seasonal retail jobs. She had numerous psychological evaluations throughout adulthood, all of which reported Rose's Full Scale IQ to be in the borderline range of intellectual functioning, with a significant difference (> 20 points) between Verbal (low-average range) and Performance (mild ID range) IQ scores. When she was 27, it was finally suggested by one psychologist that her symptoms and social history were consistent with an ASD and she was diagnosed with PDD-NOS. She moved into her current group home residence when she was 33.

There were two intake sessions for Rose—the first she attended alone and the second with her mother, who came to provide historical information. Rose appeared as a heavyset woman, neatly dressed in a color-coordinated casual outfit and well groomed. She was very talkative from the outset, making good eye contact and enthusiastically answering the therapist's questions and comments. She demonstrated a lack of awareness of social boundaries, however, as she walked over to the therapist's desk on her way in and tried to read some of the documents on it. She also interrupted the therapist frequently as the interview progressed, although she would stop herself, put her hand over her mouth, and say, "Oh. Sorry. I can't help it sometimes!" She was very articulate as she described her problems and goals for therapy. At times, she would make an odd hand gesture to emphasize a point; she would raise one hand and splay her fingers stiffly and wave the hand back and forth in that position. She reported that she "hated" the day program she was attending because it is for "lower-functioning" people—she whispered when she said, "I'm sorry, but it is for people who are retarded. I am not retarded." She also demonstrated some insight in that she voluntarily reported problems controlling

her anger, that she was "too hyper," "stressed out," and wanted to learn how to focus better on her work.

Because Rose's developmental history was marked by some language and cognitive delays, she did not meet DSM-IV-TR for AS, but her profile is consistent with ASD as described in DSM-5. Like the previous four cases, Rose's independence potential is much higher than her current level of functioning in daily living. Her presentation at intake included several difficulties with social interaction, including "deficits in nonverbal communicative behaviors used for social interaction" (failure to read nonverbal cues and boundaries communicated by others), lack of "social–emotional reciprocity" (poor turn taking in conversation), and "stereotyped or repetitive motor mannerisms" (odd hand gestures; American Psychiatric Association, 2013, p. 50).

Rose's impairment in social interaction had manifested most dramatically in her work life—*occupational problems* are typical for adults with ASD. Many of her intellectual abilities were significantly more advanced than her social skill level, leading to unsuccessful experiences in almost any vocational setting she entered. Like many adult patients, her social behavior interfered with her performance whenever she was given a chance to work at a job that was suitable for her cognitive ability. On the other hand, when placed in a training program on par with her social functioning level, she quickly became bored and frustrated because the tasks were not intellectually challenging enough. As part of a vicious cycle, her social functioning regressed further because she expressed her anger in disruptive ways due to poor impulse control and difficulty with emotion regulation (ER).

The following description of Seth is also marked by vocational underachievement due to deficits in social functioning and extreme stress reactions.

Seth: Occupational Problems and Maladaptive Stress Responses

Seth is a 44-year-old single Jewish unemployed man who was referred by his vocational counselor to address problems with interpersonal behavior. Seth lives with a roommate in an apartment about 15 miles outside New York City and receives weekly visits from a staff member of an assisted living program for adults with developmental disabilities. He is pursuing an associate's degree and takes one course per semester. He is financially supported by Social Security disability benefits.

Seth's vocational counselor had been working with him for several months as part of a supportive employment program for people with disabilities. The counselor reported that Seth's options for job placement were limited by his poor interaction skills and high anxiety. Seth talked incessantly, asked intrusive questions, and became overwhelmed by minor demands (e.g., could not manage more than one college course at a time, despite the fact he was not working). The staff from both his employment and residential programs reported that Seth was developmentally disabled, but they were unsure of his diagnosis because he did not appear to have ID.

Seth had social and emotional problems from early childhood. His developmental milestones were achieved on time and he appeared to be intellectually above average in many areas. However, he always preferred to play alone and engaged in behaviors that annoyed other children. As a consequence, he had no friends. He was identified as "emotionally disturbed" by his school and by the time

he reached high school, he was placed in a special vocational program for students with learning and behavioral problems, where he remained until he turned 21. There he developed an interest in computers, which was encouraged by his teachers. In his early 20s, he was able to apply the skills he had learned when he was hired by a large aerospace company as a computer operator. His job involved data entry; he worked there full time for 12 years, while living with his parents and taking courses toward his associate's degree on a part-time basis. Long shifts and interpersonal difficulties caused Seth to feel pressured constantly on the job. In his last year there, at the age of 35, he had begun to engage in self-injurious behavior (scratching and picking the skin on his hands and forearms). He performed the behavior in private, but the scabs and skin marks, along with other odd behaviors at work, drew the attention of coworkers. Eventually, a counselor with the employee assistance program at the company urged him to go into the hospital. He voluntarily entered a private psychiatric hospital, where he stayed for 2 months. He was given the diagnosis of psychotic disorder-NOS. After discharge, he returned to work for several months, but he continued to have difficulty coping, so he left the position and went on long-term disability. Seth remained at home, continuing his coursework for 7 years, until he moved into the apartment where he was living at the time of intake.

There were three intake sessions, two with Seth alone and one during which his parents joined him. Seth came to the sessions neatly dressed and groomed. He was slightly overweight, with thinning gray hair. He avoided eye contact but spoke freely. He had excellent articulation, to the point of sounding pedantic, and he spoke in a monotone. He appeared enthusiastic about the interview and seemed to enjoy sharing information about his life with the therapist. Several times when he smiled, he flapped his hands at the same time. His focus on details made transitions from one topic to the next slow because he would not shift until he had exhausted all of the information on a subject. For all sessions, he had some difficulty terminating the discussion when the time was up, and he appeared to ignore both the verbal and nonverbal cues the therapist was giving him to indicate that it was time to stop.

Seth's historical and current behavior was marked by several symptoms of DSM-5-defined ASD. His childhood years were characterized by "deficits in developing, maintaining, and understanding relationships," which had continued into adulthood and manifested as poor relationships with his coworkers. During the interview, he demonstrated signs of other interactional difficulties, such as "abnormalities in eye contact and body language," and poor demonstration of "social–emotional reciprocity" in conversation when he failed to respond to the therapist's cues to switch topics or end the session. Throughout his life, he had demonstrated "inflexible adherence to routines" and became highly stressed when routines were unpredictable. Indeed, unpredictability seemed to constitute a common precipitating factor for his self-injurious behavior in childhood as well as adulthood. He also demonstrated "repetitive motor mannerisms" (American Psychiatric Association, 2013, p. 50) during the interview when he flapped his hands.

Like many adults with ASD, Seth was *unemployed,* despite his experience and talent in working with computers. Although he was taking college courses, he was making relatively slow progress toward a higher education, considering his intellectual abilities.

It is common for adults like Seth to have a low frustration tolerance and *maladaptive reactions to stress*. Sometimes the behavioral manifestations of these maladaptations can lead others to see these individuals as bizarre or dangerous, such as what occurred in response to the self-injury in Seth's case.

Frequently, extreme responses to stress lead to the development of comorbid psychiatric disorders, as illustrated by the case of Bob.

Bob: Severe Anxiety and Depressive Symptoms

Bob is a 29-year-old single Jewish man. He holds a bachelor's degree in communication arts but is unemployed, lives with his parents, collects Social Security disability benefits, and attends a part-time psychiatric day treatment program. Bob also has diabetes. He was referred to treatment by an evaluating psychologist in October 2001 to address acute symptoms of anxiety and depression triggered by the World Trade Center disaster the month before.

Bob's parents reported that his current episode of severe anxiety and depression began a few days after 9/11. Bob was at home on Long Island, about 10 miles outside of New York City, when his mother phoned him and told him about the attack. He then watched the news coverage on TV throughout most of the day. He began questioning his family members repeatedly about the event, how it could have happened, and whether it would happen again. He reported that he could not sleep soundly and would lie in bed thinking about it over and over again. When he questioned family members about it, their answers would temporarily alleviate his anxiety, but then he would feel compelled to start questioning them again shortly thereafter. These episodes happened 10–20 times a day and were straining his relationships with his family members. His parents also reported frequent angry outbursts, which included verbal aggression toward them.

Bob has a long history of learning, social, and emotional problems. In elementary and middle school, he received special education services because of learning disabilities. He had problems making friends in all grades and had been to see mental health professionals on and off. His parents could not recall any diagnosis, but he was said to exhibit "behavior problems" and social difficulties. They reported that he became extremely upset whenever there were unexpected changes in routine, appeared "bothered" by wearing certain types of clothing (e.g., would "act itchy"), had some facial tics, and appeared indifferent to his peers. In high school, he no longer received special services, but his social adjustment continued to be poor. He went away to college but believes his parents forced him to do so. Socially he improved slightly while at college, and he was able to make some friends on campus. Although he kept in touch with them after graduation, he described them as "mentally impaired." When Bob was 21 he was diagnosed with diabetes, which was a shock to him and his parents. When he was 26, he experienced a severe decompensation marked by symptoms of anxiety (obsessions and compulsive behavior) and depression, triggered by a major social disappointment (a former high school female peer rejected him). A psychiatrist at the time diagnosed him with major depressive disorder and OCD. He has been treated by a psychiatrist since that time.

Bob and his parents came to the intake together. During the interview, he made no eye contact and displayed psychomotor retardation, sitting in a slumped posture and looking steadily toward the floor. However, he appeared to attend to

the interview, in that he responded to each question and interchange—albeit in a very negative and defensive fashion, with a constant scowl on his face and expressions of anger and hostility toward the therapist and his parents throughout the session.

Bob was manifesting many acute mood and anxiety symptoms at the time of intake, leading to differential diagnosis challenges when considering the presence of ASD. Some of the clues for DSM-5-defined ASD that were present in the above description, however, include his historical failure in developing, maintaining, and understanding relationships and his rigid "adherence to routines." The "abnormalities in eye contact" (American Psychiatric Association, 2013, p. 50) demonstrated during the intake could easily have been attributed to his depression, but his parents reported that he had poor eye contact during social interactions ever since he was a very young child.

Bob's case illustrates a common phenomenon seen in adults with ASD: The inability to cope with stress and change contributes to the development of *comorbid mental illness*. Like many patients with ASD, Bob suffered from comorbid anxiety symptoms. He met criteria for OCD and a mood disorder (major depressive disorder). Because his case is the most complex of the examples given, we revisit it the most throughout the book. His detailed case formulation and individualized treatment plan are presented in Chapter 4.

These seven cases constitute a heterogeneous sample of adult patients in terms of age, gender, level of intellectual functioning, level of independence, academic achievement, and severity of symptoms. Their presenting problems varied, as they came into therapy asking for help with ASD specifically and/or because of some other mental health issue, such as depression, anxiety, or anger. Certain features tie them together: They all have some type of impairment in social functioning that was evident early in life, and they all demonstrate behavioral eccentricities that would be considered, in DSM-5 terminology, "restricted, repetitive patterns of behavior, interests, or activities" (American Psychiatric Association, 2013, p. 50). For all seven cases, their symptoms have the consequences of *isolation and poor social support systems,* a *sense of failure* in attaining interpersonal or occupational goals, *chronic stress* in daily living, and a *lack of coping abilities* resulting in *maladaptive responses* to stress.

Understanding the Symptom Picture in Adults with ASD

As these cases illustrate, the symptom picture is complex for more cognitively able adults with ASD. Their problems can be difficult to conceptualize and accurately diagnose because they are long-standing and driven by multiple causes. The rest of this chapter attempts to provide a clearer understanding of the origins of complaints and behaviors typically seen in adult patients at intake. To achieve greater clarity, it is not only important to understand what ASD *is,* but also to understand what it *is not*. The next two sections address the latter point by discussing areas of possible confusion and misconception that involve differential diagnosis and common myths. A general conceptualization of the problems faced by adults with ASD when they seek psychotherapy follows in Chapter 2, including core problems and comorbid conditions.

Differential Diagnostic Issues

The symptoms of adult ASD manifest in a wide variety of ways, as illustrated, so there may be a lack of clarity in mental health practitioners about how to diagnose the syndrome, particularly in adults. At times, symptoms mimic other disorders, including anxiety and mood disorders; at other times, adults with ASD experience true symptoms of comorbid disorders while also meeting full criteria for ASD. First, I focus on differentiating ASD from other conditions. Comorbidity issues are covered in Chapter 3. The disorders that can have similar features, and therefore can easily be confused with ASD, are social (pragmatic) communication disorder (SCD), psychotic disorders, ADHD, anxiety and related disorders, mood disorders, and personality disorders (PD). As mentioned earlier, clinicians serving adults may be called upon to use DSM-5 or ICD-10, depending on the circumstances. Differential diagnosis issues are similar in both systems, but DSM-5 has some changes in how the broad diagnostic categories are organized and also some rule-out guidelines. The DSM-5 language is used, but ICD-10 is mentioned where differences are relevant to a clinician.

Social (Pragmatic) Communication Disorder

SCD was newly introduced in DSM-5. It did not exist in earlier versions of DSM. It is also not listed in ICD-10 or earlier versions. The category is meant to describe individuals who have significant *problems with social communication,* but who do not have restrictive and repetitive patterns of behavior as seen in people with ASD. This phenomenon has long been discussed in the speech–language pathology (SLP) literature, and the term *pragmatic* is one used in that field to describe the social use of language. So, a person could have well-developed language skills (e.g., articulation, vocabulary, sentence formation), but if that individual makes *poor use of language to modulate social interactions,* a speech–language pathologist would call it a problem of "poor pragmatic skills." The disorder has many overlapping features with ASD when it comes to social communication deficits. If a patient presents with social communication problems, both SCD and ASD would be considered. SCD would be assigned if the patient does not have marked problems in the restricted, repetitive patterns of behavior domain. This diagnostic category is so new that there have been many concerns raised about its validity and the reliability of instruments that are meant to assess for it (Brukner-Wertman, Laor, & Golan, 2016; Norbury, 2014; Reisinger, Cornish, & Fombonne, 2011; Simms & Jin, 2015). In a study by Wilson and colleagues (2013) in the United Kingdom comparing DSM-IV-TR, ICD-10, and DSM-5 in an adult clinic sample, it was found that a portion (19%) of the sample that met criteria for ASD using ICD-10 would have their diagnoses converted to SCD when DSM-5 was applied. This could be partly due to a portion of those cases having been PDD-NOS before and not quite fitting into a specific ASD or AS symptom profile. This could also be due to the possibility that restricted and repetitive behaviors shift and change across the lifespan and may not be present at the time of the clinical assessment of an adult, thereby being mistaken as being absent. Further research is needed in this area to fine-tune differential diagnosis techniques between ASD and SCD. For the present purposes, clinicians should be thorough in assessing the restricted and repetitive behavior domain of symptoms to be sure those symptoms have always been absent before assigning a diagnosis of SCD.

Psychotic Disorders

Some of the symptoms and associated features of ASD can be erroneously identified as psychosis (Van Schalkwyk, Peluso, Qayyum, McPartland, & Volkmar, 2015). Sometimes, adults with ASD may show an *intense preoccupation with a particular area of interest* and build an *elaborate internal life* around it (e.g., a specific video game series, comic book, or anime character). They may have problems organizing themselves and their environment (executive function deficits). Difficulties with *stereotyped motor mannerisms* and *rigid adherence to routines* or ideas may look like positive symptoms of *schizophrenia*. They may have a *suspicious and untrusting attitude* toward people that can be mistaken as paranoia but which has actually emerged in response to lifelong histories of being bullied, ridiculed, and rejected by others, as well as their processing deficits, which cause social misperceptions. Likewise, there is a *lack of spontaneous seeking to share enjoyment, lack of social reciprocity,* and *flat or inappropriate affect,* all mimicking negative symptoms. In addition, when facing extreme stress, individuals with ASD may show a marked deterioration in functioning that is not clearly linked to an episode of another psychiatric disorder.

Professionals working with individuals with ASD have nicknamed these incidents as "meltdowns," and they are often extreme anxiety reactions to "sensory overload." Dramatic, bizarre, and destructive behaviors may emerge during these episodes, such as sudden withdrawal ("shut down"), incoherent speech, screaming, destroying property, or self-injury (banging head on wall, punching, scratching, or cutting self). However, these signs of distress tend to disappear once the stressful factors are removed or resolved, and the individual can quickly return to his or her previous level of functioning. This "bounce-back" effect is not usually observed in persons experiencing a true psychotic episode. Other differentiation features are described by DSM-5, Ghaziuddin (2005), Crespi and Badcock (2008), and Solomon and colleagues (2011). Age of onset for ASD is early childhood, but usually late adolescence or later for schizophrenia. Hallucinations and delusions are absent in ASD. Social pragmatic language is more impaired in ASD. A careful interview is needed to differentiate delusions from the overvalued ideas and rich fantasy life that can be seen in ASD, and also from the literal ways these patients interpret the interviewers' questions (Chapter 3 covers this area in more detail).

Attention-Deficit/Hyperactivity Disorder

Problems with *attention* and *motor control* are commonly associated features of ASD. Some studies have shown high rates of overlap in the symptom pictures of ASD and attention-deficit/hyperactivity disorder (ADHD). Child studies have shown high rates of comorbidity in ADHD samples. For example, Gillberg and Gillberg (1989) found that 21% met criteria for AS and another 36% had some "autistic traits." Conversely, in a sample of clinic patients who met criteria for AS, 28% also met criteria for ADHD (Ghaziuddin, Weidmer-Mikhail, & Ghaziuddin, 1998). More recent epidemiological studies showed that about 30% of children with ASD across all subtypes had comorbid ADHD profiles (Simonoff et al., 2008) and similar rates were shown in one adult study (Lever & Geurts, 2016). Many adults with ASD with whom I have worked had previously been diagnosed with ADHD before it was determined that they instead or in addition had ASD.

In contrast to earlier editions, DSM-5 allows for a comorbid diagnosis of ADHD with ASD. ICD-10 does not, stating that the symptoms must "not meet criteria for pervasive developmental disorders." No matter which system the clinician is using, differential diagnosis issues must be addressed for both documentation and treatment planning purposes (Craig et al., 2015; Ghaziuddin, 2005; Taurines et al., 2012). Research in this area is in its infancy, but both brain imaging and social cognition measures have been able to identify some overlapping and distinguishing features when people with ASD alone, ADHD alone, and ASD + ADHD are compared (Buhler, Bachmann, Goyert, Heinsel-Gutenbrunner, & Kamp-Becker, 2011; Craig et al., 2015; Taurines et al., 2012). These findings suggest that people with ASD alone or ASD + ADHD compared to ADHD alone have fewer problems with inhibitory control, more deficits with social cognition (e.g., theory of mind [ToM]) abilities, more significant social communication deficits, and more impaired adaptive behavior. When using the individualized case conceptualization approach outlined in this book, it is important to focus on symptoms of inattention or impulsivity if they are present and to ensure that the best empirically supported therapies are included in the treatment plan for these types of problems.

Anxiety and Related Disorders

DSM-5 radically changed the way "anxiety disorders" are categorized. For example, OCD, traditionally considered one of the anxiety disorders, has been removed from that section and given its own category along with conceptually similar conditions, which is called "obsessive–compulsive disorders and related disorders." Posttraumatic and acute stress disorders have also been removed and put into a separate "trauma- and stressor-related disorders" section. I discuss these disorders together here because, despite the division into separate chapters, DSM-5 still acknowledges a close relationship among anxiety disorders, obsessive–compulsive and related disorders, and trauma- and stressor-related disorders (American Psychiatric Association, 2013, p. 265). In addition, most research cited here was done using DSM-IV or ICD-10 categorization of anxiety disorders.

Every adult patient with ASD I have met has struggled with anxiety in one form or another. Studies (using DSM-IV-TR criteria) of people with ASD of all subtypes have shown reliably that clinical levels of anxiety are much more likely to be observed in that population as compared to same-age peers without ASD (Maisel et al., 2016). The incidence of comorbid DSM-IV-TR-defined anxiety disorders, combining all categories, has been reported to range from 31 to 59% in adult samples without ID (Hofvander et al., 2009; Joshi et al., 2013). Because the comorbidity rates are so high, differentiating ASD from some anxiety disorders is a complex task (Tsai, 2006). Chapter 3 elaborates more on the presentation of anxiety disorders as they appear with ASD in adult patients seeking treatment. Here the focus is on helping to differentiate between a patient with an anxiety disorder with *no ASD* and a patient who has an ASD (with or without a comorbid condition). The disorders that can most easily be confused with ASD are social anxiety disorder (SAD; aka, social phobia) and OCD.

SAD can be hard to differentiate from ASD, especially because it so often co-occurs with it (Bejerot, Eriksson, & Mörtberg, 2014; Rydén & Bejerot, 2008; White, Bray, & Ollendick, 2012). *Avoidance of social situations* is not necessarily seen in all cases of ASD. Some adults with ASD are quite gregarious and seek to engage people on a regular

basis because they enjoy the company of others and seem oblivious to the consequences of their social mistakes. For those cases, SAD may not be as readily considered by a clinician. However, for those who do appear to be avoiding social interactions, the clinical presentation can in some cases mimic SAD, and in other cases, be a manifestation of a comorbid SAD. Swain, Scarpa, White, and Laugeson (2015) point out that low social motivation is not synonymous with social avoidance. In fact, high motivation could result in avoidance behavior because the fear of being judged is connected to the strong wish to succeed in social engagement.

One issue that can be confusing to the clinician is in the phrasing of the diagnostic criteria for SAD in DSM-5. Criterion E states, "The fear or anxiety is out of proportion to the actual threat posed by the social situation and to the sociocultural context" (American Psychiatric Association, 2013, p. 203). Similarly, in ICD-10-defined social phobia, Criterion C states that " . . . the individual recognizes that these (fears) are excessive or unreasonable" (World Health Organization, 1992, p. 93). If these criteria are taken literally, many of the adults I have treated with ASD who do exhibit the other symptoms of SAD would not meet full criteria. This is because some measure of fear about social encounters is arguably *in proportion* to the actual threat and *not excessive or unreasonable*. Any adult who meets criteria for ASD, by definition, has deficits in the skills necessary to have successful social interactions. It is not excessive or unreasonable for someone to fear social situations if the individual is not skilled enough to handle them. Most of the adults who present for therapy with this problem are painfully aware of their lack of skill and have learned avoidance as an adaptive strategy on the one hand, but on the other, the avoidance behavior ends up perpetuating the anxiety, which then contributes to the misunderstanding of social cues and other social cognition deficits that are central to ASD (White et al., 2013). Thus, the anxiety does reach the clinical levels necessary to meet criteria for SAD.

Thanks largely to White and colleagues, SAD is one of the anxiety disorders that has received the most research attention in relation to ASD, including as it occurs in adults (Maddox & White, 2015; Swain et al., 2015; White et al., 2012). They have provided substantial evidence that SAD and ASD are two distinctive, but commonly co-occurring disorders. The bidirectional relationship between them, described by White and colleagues (2013), results in the development of a vicious cycle of sorts that can be observed in adult patients. These studies offer some guidance for clinicians toward differential diagnosis among SAD alone, ASD alone, and ASD with SAD. In sum, people who have SAD alone will show a marked fear of, distress in, and active avoidance of social situations because of serious concerns about being negatively judged and evaluated. They may act in ways that lead to humiliation, but do not have marked social skill deficits, as do people with ASD.

People with SAD alone may have an earlier onset of social anxiety symptoms (elementary school), as opposed to cases of SAD where ASD is also present—those individuals may report a later onset (adolescence). People with ASD alone will demonstrate the social communication skill deficits and restricted, repetitive patterns of behavior that are central to the disorder, but do not demonstrate the fear of social situations, concern about negative evaluation or judgment, distress when exposed to social situations, and resultant avoidance of the feared social scenarios. For example, a person with ASD alone may have a low frequency of social engagement because he or she is not interested in people (low social motivation), not because he or she is fearful of

them. Finally, people with both ASD and SAD exhibit more social impairment and skill deficits than people with SAD alone; they demonstrate social awkwardness that is not seen in SAD alone. In addition, people with both disorders may have insight into the role that their social skill deficits play in their social anxiety.

OCD can also be confused with ASD by clinicians. Symptoms under "restricted, repetitive, and stereotyped patterns of behavior" (American Psychiatric Association, 2013, p. 50), at least superficially, look like symptoms of OCD. The *intense focus on an interest area* can take on an obsessional quality, for instance. The *overreliance on nonfunctional routines and rituals,* as well as *repetitive motor mannerisms,* can appear to be compulsions. Some studies have suggested that there are some overlapping features seen in both OCD and ASD, such as attention-switching problems (Anholt et al., 2010; Kaur et al., 2016). Nevertheless, there is also enough evidence to suggest that these are two distinct disorders than can each occur alone in an individual, or can be comorbid.

Studies have shown that about 20% of patients seeking treatment for OCD have traits of ASD that were comorbid but distinguishable from the OCD (Bejerot, Nylander, & Lindstrom, 2001; Kaur et al., 2016). In a sample of adults with ASD and no ID seeking treatment for ASD-related problems, 24% met criteria for OCD, either currently or by history (Joshi et al., 2013).

While both conditions involve repetitive thoughts and actions, some investigators have compared the types of obsessive–compulsive symptoms reported by adults with OCD alone to adults who have ASD alone and those who have ASD + OCD. In one case-controlled study, the investigators administered the Yale–Brown Obsessive Compulsive Scale (Y-BOCS) to clinical samples of adults with ASD alone and those with OCD alone (McDougle et al., 1995). Although repetitive thoughts and behaviors were reported by all patients, qualitative differences in the content of obsessive thoughts and types of behaviors were reported between the two groups. For example, patients with OCD reported more thoughts with aggressive, contamination, sexual, religious, symmetry, and somatic content than patients with autism. However, patients with ASD alone reported more compulsions around repetitive ordering, hoarding, telling/asking, touching, tapping, rubbing, and self-damaging/self-mutilation than patients with OCD, who reported more cleaning, checking, and counting compulsions. In another study using the Y-BOCS (Russell, Mataix-Cols, Anson, & Murphy, 2005), comparisons were made between OCD alone and ASD with OCD (and without ID). In this sample, somatic obsession and repeating and checking rituals were significantly more frequent in the OCD alone group. Sexual obsessions were the only symptoms that were reported at a higher rate by ASD patients.

More research is needed in this area, but we have enough data to warrant efforts by clinicians to differentiate OCD from ASD in their patients, while also considering that the two distinct disorders can co-occur. Ghaziuddin (2005) suggests that in patients with OCD, the obsessions and compulsions are "ego dystonic"—that is, perceived as intrusive and unwanted by the sufferer. The compulsions serve the function of neutralizing the obsessions and alleviate negative affect in the short run (until the cycle starts again). The ritualistic behaviors that are core to ASD do not serve that neutralizing function seen in OCD, do not seem to cause distress, and the preoccupation with a narrow interest can actually be a source of pleasure for these individuals. For some, these interests develop into functional talents that can fuel a successful career or be an important source of life enrichment. If obsessional interests and ritualistic behavior are present along

with the social communication deficits described for ASD, and the symptoms have been present since early childhood, then they are likely to be part of that syndrome. The topic of comorbidity is addressed in later sections, but for the purposes of this discussion, an additional diagnosis of OCD can be made when the preoccupations and ritualistic behavior represent a marked departure from the individual's baseline level of functioning, and are causing marked distress. Bob's case illustrates this phenomenon.

Mood Disorders

As with anxiety disorders, there is a high incidence of mood disorders comorbid with ASD. For example, in a study of psychiatric problems in adults with ASD, 65% met criteria for some kind of DSM-IV-TR-defined mood disorder (Hofvander et al., 2009). The rates of major depressive disorder have been reported to be from 33 to 77% in adult ASD samples (Joshi et al., 2013; Lever & Geurts, 2016) and from 7 to 25% for bipolar disorders (Joshi et al., 2013; Skokauskas & Frodl, 2015). One study of adult clinic outpatients seeking treatment for mood disorders in Japan showed significantly higher rates of ASD symptoms compared to the general population sample (Matsuo et al., 2015). Hence, this topic is addressed frequently throughout this book. It is difficult to ascertain whether some features seen in patients where ASD is suspected are part of the autism spectrum, part of a mood disorder, or both (Matson & Williams, 2014). At times the presence of a known developmental disability can obscure a clinician's view, and a mood disorder can be missed. This phenomenon has been called "diagnostic overshadowing" (Reiss & Szyszko, 1983, p. 396) in the literature on ID. With higher-IQ adults, where an ASD is less obvious, the overshadowing can happen in the opposite way: A person who presents for treatment of a depressive episode may have an underlying ASD that is unmasked only after the depression is successfully treated (Ghaziuddin, 2005). The typical overlapping features are discussed here with general guidelines for differentiating the source of the problem.

The impairments in social interaction that are hallmark features of ASD can make an individual appear *aloof* or *socially withdrawn*. Paired with the tendency of some individuals with ASD to demonstrate *flat affect*, these patients can appear similar to the way a person experiencing a *major depressive episode* may exhibit loss of interest in pleasurable activities. The preoccupation or *intense focus on one interest area* often presents as talking incessantly about a topic, and the individual has difficulty conversing about anything else. This symptom can be mistaken as the pressured speech seen during a *hypomanic* or *manic episode* of a *bipolar mood disorder*. Difficulty in *regulating emotion*, which is an associated feature of ASD, can manifest as *irritability, explosive outbursts,* or *lability*—and all can be symptoms of depressive or bipolar mood disorders. Finally, it has been documented that people with ASD are vulnerable to *disordered sleep* (Limoges, Mottron, Bolduc, Berthiaume, & Godbout, 2005; Matson, Ancona, & Wilkins, 2008; Richdale & Prior, 1995; Richdale & Schreck, 2009; Tani et al., 2004), which can also be a symptom of either a depressive or manic episode of a mood disorder. More research is needed to help differentiate between disordered sleep as part of the ASD phenotype and disordered sleep that is part of a separate, but at times comorbid, mood disorder. In the meantime, it is another factor that can make differential diagnosis challenging for the practitioner.

When considering mood disorders versus ASD during the diagnostic process, the clinician must consider developmental history and course of symptom

development—guidelines that were mentioned previously for psychotic and anxiety disorders. If the social withdrawal, intense interest in one topic, irritability/anger outbursts, or disordered sleep have been present since early childhood and have appeared as stable problems accompanying the social skill deficits described earlier, then they are likely to be connected with ASD. However, if these problems present suddenly or involve a worsening of preexisting problems, they are more likely due to a mood disorder, with or without comorbid ASD.

Personality Disorders

Adults with ASD who have previously sought mental health treatment commonly have received a diagnosis of a PD at some point in the past. I have most often encountered the diagnoses of *schizoid personality disorder, schizotypal personality disorder,* and *borderline personality disorder* (especially in females) in patient histories. Studies in Europe of adults with ASD have found comorbid rates of PD to be as high as 62% in one sample (Hofvander et al., 2009) and 48% in another sample (Lugnegård, Hällerback, & Gillberg, 2011). For practical purposes one could argue that ASD *is* a PD, even though it is not classified as such in DSM or ICD. In fact, Wolff (1998) points out that Hans Asperger himself described the condition as a "lifelong, genetically based, personality disorder" (p. 127). Table 1.3 lists the general diagnostic criteria for PD from DSM-5. Every patient I have treated with ASD has met all four criteria. However, we must carefully consider the DSM statement that the "pattern is not better accounted for as a manifestation or consequence of another mental disorder" (American Psychiatric Association, 2013, p. 647). In fact, the criteria for both schizoid personality disorder and schizotypal

TABLE 1.3. DSM-5 Diagnostic Criteria for General PD

A. An enduring pattern of inner experience and behavior that deviates markedly from the expectations of the individual's culture. This pattern is manifested in two (or more) of the following areas:
   1. Cognition (i.e., ways of perceiving and interpreting self, other people, and events).
   2. Affectivity (i.e., the range, intensity, lability, and appropriateness of emotional response).
   3. Interpersonal functioning.
   4. Impulse control.

B. The enduring pattern is inflexible and pervasive across a broad range of personal and social situations.

C. The enduring pattern leads to clinically significant distress or impairment in social, occupational, or other important areas of functioning.

D. The pattern is stable and of long duration, and its onset can be traced back at least to adolescence or early adulthood.

E. The enduring pattern is not better explained as a manifestation or consequence of another mental disorder.

F. The enduring pattern is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition (e.g., head trauma).

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personality disorder specify that ASD takes precedence if the criteria are met for one. The issue is complicated when assessing adults, however. For example, take a hypothetical "snapshot" of two 45-year-old men, one with schizotypal personality disorder and the other with ASD. Their presenting problems and current patterns of behavior could be identical. Both will have *odd beliefs and mannerisms,* both will have *few or no friendships,* and both will have *social anxiety*. So how can a clinician tell the difference? Unfortunately, there are little data to guide us on this issue (Ünver, Öner, & Yurtbaşi, 2015). Wolff (1998, 2000) offers a comprehensive discussion of this differential diagnosis question for children. In Wolff's (1998) estimation, schizoid and schizotypal personality disorders are highly overlapping conditions in the samples of children she has studied, and these problems "lie at one extreme end of the autistic spectrum, where it shades into normal personality variation" (p. 138).

Assessment is discussed in Chapter 3, but it should be mentioned here that I rely heavily on developmental histories when making a diagnosis. Even in older adults, gaining access to a family member who can give details about early childhood development is invaluable. ASD is the more appropriate diagnosis over schizotypal or schizoid personality if there is strong evidence for very early (preschool-age) problems with social development and restricted, repetitive patterns of behavior.

Common Myths

As a bridge between the differential diagnosis issues addressed above and the conceptualization of ASD that is coming next, I make a few more points about what ASD *is not*. As noted, the DSM-IV formulation (American Psychiatric Association, 1994) represented a radical change in the way ASDs were defined, by introducing AS and expanding our view to include individuals without ID or language impairment. Then the DSM-5 formulation (American Psychiatric Association, 2013) drastically changed things, yet again. Simply put, the diagnosis of ASD in adults who are verbal and have average or above-average intelligence is still easy to miss for many reasons. In addition to the differential diagnosis dilemmas already discussed, obstacles are created by a number of myths that many people, including professionals, continue to believe. Most are based on the old definition of "classic" autism that practitioners may have learned about in their training, or to which the public was exposed in the movie *Rain Man,* for instance. Table 1.4 lists some of the misconceptions that I have heard expressed as recently as the year of this writing. In the next section, following each myth is a related quote, paraphrased from what practitioners have said to me when trying to rule out ASD erroneously.

TABLE 1.4. Myths about ASD

- People with ASD are always aloof and uninterested in others.
- People with ASD have no relationships.
- People with ASD are usually male—it's a guy thing.
- People with ASD do not make any eye contact.
- People with ASD lack empathy for others.
- People with ASD are intellectual geniuses.

People with ASD Are Always Aloof and Uninterested in Others

"He can't have ASD because he is very talkative and engaging." By definition, people with ASD struggle with the complex skills required to interface successfully with others. However, many have a normal desire to interact with others, to belong to a social network, and to be liked. Some are so determined to talk to people that they will do so incessantly, despite signs that they are making social mistakes.

People with ASD Have No Relationships

"She can't have ASD; she is married." Some people have the basic skills to make a small number of friends and maintain those relationships in adulthood, even to the point of being married or in long-term romantic partnerships. They may complain that they do not feel confident or satisfied with these relationships, a report that is consistent with the ASD definition. However, a total absence of relationships is not necessary for the diagnosis of ASD.

People with ASD Are Usually Male—It's a Guy Thing

"She doesn't have ASD—isn't it a guy thing?" As discussed earlier, prevalence rates show a higher incidence in males, but the disparity between male and female rates may be inflated. Not only does it occur in females but the trend of late diagnosis in higher-IQ women is likely to be partially caused by myths and misconceptions that are held by laypeople and professionals alike.

People with ASD Do Not Make Any Eye Contact

"He can't have ASD. He made a lot of eye contact with me during the interview." Some people with ASD do exhibit complete avoidance of eye contact, especially when first meeting someone. Others cannot maintain eye contact and listen at the same time and must look away in order to process what is being said. However, many individuals do make eye contact consistently, even if there are some unique features. Just as described in DSM-IV-TR, the impairment is in "the use of eye-to-eye gaze . . . to regulate social interaction" (American Psychiatric Association, 2000, p. 84). Some people may show sporadic glances, whereas others may make *too much* eye contact to the point of staring. It is important to remember that the failure to utilize eye contact appropriately does not mean that eye contact is missing completely. Also, it is only one of the symptoms in a category and does not have to be present at all for the diagnosis to be made.

People with ASD Lack Empathy for Others

"She can't have ASD. She seems to really care about her ailing mother." People with ASD have difficulty with social reciprocity, as specified in the DSM criteria. This means they do not show "turn taking" in conversation and the spontaneous "give-and-take" of information and experiences that characterize socially satisfying interactions. They may also have difficulty with perspective taking—that is, imagining what another person

might be thinking or feeling. In my clinical cases, I have found that these problems are often rooted in an impaired ability to show cognitive shifting. This issue is addressed in Chapter 2, where core deficits are described in more detail. What appears to be a lack of empathy may sometimes be a failure to "shift gears" at the rapid pace required by a social situation. With a history that is void of opportunities to practice reciprocal relating, a self-absorbed style may develop. Anecdotally speaking, when given the appropriate information and enough time to process it, patients with ASD can show as much empathy and concern for another person as the rest of the population. (Recent data supporting this clinical observation are presented in Chapters 2 and 6.)

People with ASD Are Intellectual Geniuses

"He can't have ASD. He does not have any kind of special talent or 'savant' qualities." It is true that people with ASD have scattered profiles of skills and deficits. There is great variability within each individual in terms of abilities versus disabilities. For example, a person with ASD may have superior mathematical abilities but extremely poor visual–motor coordination. However, there is also great variability across ASD patients. Some indeed have an area of superior ability that far exceeds the average person or their own ability in other areas. Others do not have such an exceptional talent, and it is not necessary for this to be present in order to make the diagnosis.

Strengths and Assets

Ironically, the characteristics that can put adults with ASD at odds with others or at risk for problems are the very same characteristics that contribute to their talents and abilities. When therapy goals are being set, it is important not only to identify the problems that are targeted for reduction but also to highlight the assets and coping strategies that the adult patient has already developed before coming into treatment. Although this chapter highlighted the vulnerabilities of these individuals, I have found that they are also incredibly resourceful and clever in designing strategies, often without any help, to negotiate their way through a world that is, to them, very confusing and threatening. The individualized treatment plan should always include interventions geared toward helping the patient recognize the things he or she *has already done to successfully adapt* and to build upon those self-taught skills. This approach is outlined further in a self-help book I wrote for adults (Gaus, 2011), which is largely based on a problem-solving approach driven by positive psychology concepts. Some of the common strengths are listed below. These are also the reasons I so thoroughly enjoy working with this population.

Creativity and "Unconventional" View of the World

Because these individuals have idiosyncratic perspectives, they often think of ideas that others would not. This resource can be useful in therapy during treatment planning problem solving.

Honesty

Due to a lack of understanding about "social boundaries," some individuals with ASD will not censor their thoughts when speaking. Although this absence of self-monitoring can get them into trouble socially, it can be useful in sessions because the therapist can often assess thoughts more readily than with patients who do not have ASD.

Sense of Humor

People with ASD often complain that they cannot understand humor and struggle to "get" what other people are laughing about. On the other hand, they will use humor effectively when they do "get it" and can be quite clever. Along with social skill building, these patients benefit from learning to utilize their humor to enhance their interactions with others.

Take Laura, for example, a woman who did not learn of her ASD diagnosis until she was in her mid-30s, but had always been aware of her difficulty understanding the nuances of social interactions. Even though she did not know why she was confused by the behavior of other people, sometimes she used cartoon drawing as a way of expressing the humor she saw in her struggle. Figure 1.1 is a cartoon she had drawn approximately 10 years before her diagnosis, after she learned what the term *brainstorming* meant. The cartoon depicts a typical meeting she would have to attend while working as a clerk in a large bureaucratic institution, a job that had been quite stressful for her. In it, she is making fun of her own overly literal interpretation of brainstorming by drawing actual brains whirling around the room, and her own need to protect herself from the apparent chaos, as suggested by the woman with the kerchief on her head who is trying to "keep her brain in her head." Not only was it helpful for her to laugh about

FIGURE 1.1. Cartoon by Laura, a person with AS for whom humor has served an adaptive function. Copyright © 1994 Laura Wysolmierski. Reprinted by permission.

this issue but she was also creating comedic common ground between herself and typical people. By illustrating how nonsensical some meetings can be, she connects with all of us who have been in similar situations at our jobs.

Responsiveness to Structure

Because the world can be confusing to individuals with ASD, they tend to adhere, sometimes rigidly, to any set of rules that does make sense to them. They rely on structured and predictable routines and are drawn to using logic to solve problems. For these reasons, many of these individuals find it easy to understand the cognitive model and the rationale behind the use of CBT.

Willingness to Observe and Evaluate Self

I admittedly work with a self-selected and motivated population of patients. With that, by the time the typical adult with ASD seeks outpatient treatment, he or she is acutely aware of "doing something wrong" in social situations. The patient is usually very open to feedback and willing to engage in self-observation exercises. Although some patients are not so compliant (discussed further in Chapter 10), on average these individuals make excellent candidates for CBT.

Chapter Summary and Conclusions

In this chapter, the reader was introduced to ASD and what it looks like in adult psychotherapy cases. The symptom complexity and areas of potential confusion were clarified through discussions of shifting classification systems, differential diagnosis, and common myths. Strengths and assets were also highlighted because therapists will find these characteristics crucial during the assessment and treatment planning phases of therapy. The next chapter presents the research evidence for core problems, a description of how they serve as risk factors for secondary emotional disorders, and a rationale for using CBT with these patients.

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