Chapter 2

# Assessment of the Child Following Crisis

## THE CHALLENGE OF DIFFERENTIAL DIAGNOSIS

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A defined set of criteria and specific symptoms for diagnosing a disorder enhance the study, understanding, and treatment of the disorder (Allnutt & Chaplow, 2000; Nader, in press). Assessment for posttraumatic stress disorder (PTSD) or acute stress disorder (ASD) is common for youth who have been exposed to traumatic events. As van der Kolk and Courtois (2005) point out, however, the diagnosis of PTSD captures only limited aspects of posttraumatic psychopathology. Youth may respond to their traumatic experiences with disorders, symptoms, and patterns of thought and behavior other than those described in the diagnostic criteria for PTSD (Nader, 2001, in press). Accurate diagnosis is important to successful interventions for both youth and adults.

For disorders in the *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition (DSM-IV; American Psychiatric Association [APA], 1994) and its text revision (DSM-IV-TR; APA, 2000), a great deal of co-occurrence and symptom overlap exist (Cohen & Mannarino, 2004; Ingram & Price, 2001; Kimerling, Prins, Westrup, & Lee, 2004; see Boxes 2.1 and 2.2, below). Most studies focus on one disorder without taking into account the frequent comorbidity of disorders and the effects of disorder combinations on the nature of response and recovery (Kessler, 2000). PTSD presents with high rates of comorbidity. Evidence suggests that treatments for simple PTSD may not be applicable to complex trauma or PTSD with comorbid disorders (Ford, Courtois, Steele, van der Hart, & Nijenhuis, 2005; van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005).

## MIXED FINDINGS IN RESEARCH ON CHILDHOOD TRAUMA

For many variables assessed in the study of childhood trauma, findings have been mixed (Nader, in press). Different experiences may result in similar reactions, and similar experiences may result in diverse outcomes (McBurnett, King, & Scarpa, 2003; Nader, in press; Yates, Egeland, & Sroufe, 2003). Multiple factors affect youth's reactions to traumatic experiences (Nader, 2004a, in press; Webb, 2004, 2006; see Webb, Chapter 1, this volume). Risk and resilience factors, such as aspects of parent–child relationships, personality traits, environmental conditions, and personal background, may influence youth's susceptibility to symptoms and influence the nature of their reactions. The varied outcomes of exposure to traumas in early life is often seen as a consequence of the transactions among such variables as temperament, attachment, coping strategies, neurobiology, and the subjective nature of traumatic experiences (Lyons-Ruth, Zeanah, & Benoit, 2003; Pasquini, Liotti, Mazzotti, Fassone, & Picardi, 2002). Reporting differences also exist among cultures and between the sexes (Nader, in press; McCrae, Terracciano, & 78 Members of the Personality Profiles of Cultures Project, 2005).

## CHILDHOOD ADVERSITIES AND ADULT DISORDERS

Retrospective studies have consistently found that adults with psychiatric disorders report exposure to childhood adversities significantly more often than other adults do (Kessler, Davis, & Kendler, 1997). Such adversities often occur in clusters. Although most studies examine specific disorders such as PTSD, Kessler et al. (1997) found that the effects of particular adverse events are not confined to any one class of disorders. When studies control for lifetime comorbidities, the effects of a variety of adversities—whether or not they meet DSM-IV(-TR) Criterion A for PTSD and ASD—are distinguished more by their similarities than by their differences. After adjusting for overlap among adversities, parental psychopathology (especially maternal mental disorder) and interpersonal traumas (especially rape and kidnapping) had comparable substantive import in adult psychopathology. Kessler et al. (1997) found that adults' recollections of one-time natural or human-made disasters were related to mood, anxiety, and maladaptive coping (addiction) disorders, but not to conduct disorder (CD) or adult antisocial behavior. Adversities were stronger predictors of early-onset than of later-onset disorders. Odds of disorder onset decreased within a decade of the adversity.

As Webb (2004, and Chapter 1, this volume) points out in her discussion of tripartite assessment (see also Nader, 1997, in press; Shaw, 2000), a youth's traumatic reactions are shaped by aspects of the youth him- or herself (e.g., traits, previous experiences, neurobiology); the youth's background (e.g., genetics, socioeconomic status, culture, subculture); the nature of the event (e.g., chronicity, intensity, individual experience, personal meaning); and the pre- and posttrauma environments. Cultural issues, for example, influence coping strategies (Pole, Best, Metzler, & Marmar, 2005), support systems (Nader & Danieli, 2005; Danieli & Nader, 2006), and sanctioned reactions to trauma (Nader, in press). This chapter examines aspects of a child that influence traumatic response, the range of youth's reactions, comorbidity, and differential diagnosis.

## CHILD FACTORS THAT INFLUENCE RESPONSE

Not all youth exposed to adversity develop problems or psychopathology (Yates et al., 2003). Some youth with little apparent life difficulty do develop problems. Risk and protective factors are not universally predictive of outcomes for youth (Sonderegger, Barrett, & Creed, 2004); they may be mediated by other influences. Nevertheless, aspects of youth's personalities, self-views, and other personal strengths and weaknesses often influence their characteristic reactions to stress (Davies, 2004; Nader, in press). Risk and vulnerability may interact or operate in concert.

### Risk Factors

"Risk factors" are variables that are empirically associated with a disorder and predict the *increased probability* of the disorder's occurring (Ingram & Price, 2001; Nader, in press; Price & Lento, 2001). "Vulnerabilities" are a subset of risk factors that may exist in any of a youth's physiological, cognitive, affective, or social/behavioral systems. In addition to the risks created by such environmental conditions as experiences of premature birth, poverty, parental mental illness, divorce, war, and maltreatment, risk has been associated with individual traits such as negative emotionality and introversion, antisocial behavior or other conduct disturbances, poor responses to challenges, fewer or lower cognitive skills, external locus of control, and low self-esteem (Caspi, 1998; Luthar, 2003; Nader, in press; Rothbart & Bates, 1998; Yates et al., 2003). The absence or diminishment of resilience factors may add to risk.

### Resilience Factors

"Resilience" suggests reduced vulnerability and the presence of protective factors. Studies have identified a number of variables that may serve as resilience factors, or, when absent, may add to risk (Nader, in press). Protective factors include personal qualities (such as intelligence, the ability to trust, a sense of self-worth, self-confidence, a realistic assessment of one's control, the ability to function well in relationships, and the capacity for appropriate self-regulation), as well as environmental conditions (such as access to needed resources, a good support system, secure caregiver–child attachments, effective parenting, and socioeco-

nomic advantages) (Fergusson & Horwood, 2003; Nader, in press; Masten & Powell, 2003). In addition, Kessler et al. (1997) found that those who passed through the risk period associated with an adversity without developing a disorder were more resilient than the average person.

Environmental and child intrinsic factors interact. A child's personality and biochemical tendencies may elicit or repel responsive care, for example (Yates et al., 2003). Supportive, responsive, structured, and affectively stimulating environments contribute to children's self-worth, social competence, empathic involvement with others, self-confidence, curiosity, and positive affective expression. Secure attachments and the consequent youth competencies foster the development of flexible problem-solving skills, effective emotion regulation, and an expectation of success in the face of adversity (Nader, in press).

### Stages of Response

The stages of response may vary for each youth or family member who has endured a traumatic experience (Nader, 2001, 2004b). Different personalities, age groups, personal histories, peritraumatic experiences, and other factors influence reactions and their progressions. Individuals exposed to the same event will have different timetables for processing aspects of the event—specific traumatic episodes and reactions such as horror, grief, and rage. Following traumas and across the course of treatment, a child or adolescent may emerge from varying degrees or stages of numbing. In order to cope, the youth may unintentionally intersperse periods of numbing and avoidance between phases of reexperiencing and arousal, or between attempts to face aspects of his or her experience and response. The youth's periodic need for avoidance of traumatic memories and thoughts can be honored across the course of his or her response while gently assisting the youth therapeutically (Nader, 1997, 2004b). When an event is perceived to be over rather than ongoing (such as the end of a war vs. ongoing conflict), or when the numbing wears off, there may be a reassessment of the experience or an aspect of it, its results, and one's role in it; of beliefs and expectations; and of the meaning of events and interactions.

## THE RANGE OF CHILD REACTIONS FOLLOWING CRISIS AND TRAUMA

Traumas can have immediate and long-term effects as well as cascading effects in a young child's life (Nader, in press). Childhood traumatic experiences have been associated with childhood and adult psychiatric disorders; physical problems and disorders; academic or job-related difficulties; emotional and behavioral problems; relationship difficulties; and suicidal ideation and attempts (Boney-McCoy & Finkelhor, 1995; Kessler, 2000; Nader, in press; Silverman, Reinherz, & Giaconia, 1996; van der Kolk, 2003). In addition to formally defined disorders, traumatic experiences may result in persistent changes that dynamically influence actions and reactions in all important arenas of life. Faulty information processing, for example, may include patterns of thinking that foster violent behavioral patterns, problematic script-like or reenactment behaviors, and/or a distorted sense of self (Crick & Dodge, 1996; Dodge, Bates, Pettit, & Valente, 1995; Nader, in press; Schippell, Vasey, Cravens-Brown, & Bretveld, 2003).

A number of DSM disorders are common after trauma. These include ASD, PTSD, and various comorbid disorders (see below). Especially after chronic or severe interpersonal traumas, traumatic reactions may be more complex than the DSM-IV(-TR) diagnosis of PTSD (Herman, 1992; van der Kolk et al., 2005). The diagnosis of "complex PTSD" or "disorders of extreme stress not otherwise specified" (DESNOS) proposed for DSM-V (van der Kolk & Courtois, 2005) was not specifically included in DSM-IV or DSM-IV-TR, but many of its characteristics are mentioned as an "associated constellation of symptoms" (APA, 2000, p. 465). Because treatment methods for a simple diagnosis of PTSD may result in inadequate treatment for more complex forms of trauma, some researchers urge the inclusion of DESNOS as a separate diagnosis in DSM-V (van der Kolk & Courtois, 2005). Studies have shown that having a history of child abuse, for example, can significantly alter treatment outcomes for psychiatric conditions other than PTSD. For children, the National Child Traumatic Stress Network Work Group on Diagnosis has recommended a diagnosis of "developmental trauma." Successful treatment for complex traumatic reactions has generally been sequenced and progressive. It engages in symptom reduction and stabilization before the processing of traumatic memories and emotions, then life integration and rehabilitation (Ford et al., 2005).

### Trauma-Related Disorders

Recognized disorders directly related to trauma include PTSD, ASD, dissociative symptoms/disorders, and complex trauma.

#### *Posttraumatic Stress Disorder*

In the last quarter of a century, the DSM diagnosis of PTSD (APA, 1994, 2000) has been used in the assessment of youth following traumatic experiences (Table 2.1). However, the debate continues about the applicability of DSM-IV(-TR) PTSD diagnostic criteria and algorithms to youth (Nader, in press). Although youth demonstrate the reexperiencing, numbing/avoidance, arousal symptoms, and impaired functioning found in PTSD as currently defined, it has become clear that there are variations by age and other variables in the manifestations of the disorder (Carrion, Weems, Ray & Reiss, 2002; Daviss et al., 2000; Fletcher, 2003; Nader, in press; Scheeringa, Peebles, Cook, & Zeanah, 2001). Moreover, to greater and lesser extents, all types of childhood trauma may result in developmental disruptions, in more complex forms of trauma, and in comorbid disorders. These disorders may occur immediately after or at length after traumatic experiences.

**TABLE 2.1. PTSD and ASD Symptoms and the Other Disorders with Which They May Be Associated**

| PTSD symptom | Disorders (in addition to PTSD or ASD) |
|---|---|
| B1. Intrusive thoughts/other recollections | GAD; MD; OCD; P; SAD |
| B2. Distressing dreams | SAD |
| B3. Reenactment, reliving/hallucination, or repetitive behaviors | D; OCD; PsyD (e.g., Sch); SUD |
| B4. Recurrent psychological distress | Anxiety disorders; SoD |
| B5. Somatic complaints | CvD; Pan; PnD; SAD; SoD |
| C1. Avoidance of thoughts and feelings | OCD |
| C2. Avoidance of activities, people, and places | Ag; Ph; Sch |
| C3. Amnesias | AmD; DA; DID |
| C4. Diminished interest in activities | MD; PsyD |
| C5. Detachment or estrangement from others | Dep; PsyD; SUD; ScPD |
| C6. Restricted range of affect | Dep; MD; PsyD (e.g., P, Sch) |
| C7. Sense of foreshortened future/pessimistic outlook | MD |
| D1. Sleep disturbance | Anxiety and mood disorders in general; ADHD; Med; SUD or sub. use; Sch; SD |
| D2. Irritability or outbursts of anger | ADHD; CD; GAD; ODD; SUD; MD |
| D3. Poor concentration | ADHD; Dys; GAD; MD; ME |
| D4. Hypervigilance, excessive fear, or frozen watchfulness | OCD; Pan; Ph; RAD; SAD |
| D5. Exaggerated startle response | |
| Impaired functioning: academic, social, other | Any of the disorders |
| Absence of emotional responsiveness | Dep; Med; PsyD (e.g. catatonia); SUD |
| Reduction in awareness of surroundings | D; Med; SUD |
| Derealization or depersonalization | Med; Pan; Ph; SUD |
| Dissociative amnesia | Med; SUD |

*Note.* See chapter text for a discussion of which PTSD symptoms and other criteria apply to ASD. Abbreviations for disorders in right column: AD, Asperger's disorder; ADHD, attention-deficit/hyperactivity disorder; Ag, agoraphobia; AmD, amnestic disorders; CD, conduct disorder; CvD, conversion disorder; D, delirium; DA, dissociative amnesia; Dep, depressive disorders; DID, dissociative identity disorder; Dys, dysthymic disorder; GAD, generalized anxiety disorder; MD, major depression; ME, manic episode; Med, medical disorders; OCD, obsessive–compulsive disorder; ODD, oppositional defiant disorder; P, paranoid schizophrenia; Pan, panic attack or disorder; Ph, phobia; PnD, pain disorder; PsyD, psychotic disorders; RAD, reactive attachment disorder; SAD, separation anxiety disorder; Sch, schizophrenia; ScPD, schizoid personality disorder; SD, sleep disorders; SoD, somatization disorder; SUD, substance use disorders. Table copyright 2006 by Kathleen Nader.

### *Acute Stress Disorder*

Following traumatic experiences, ASD lasts a minimum of 2 days and a maximum of 4 weeks (APA, 1994, 2000). It requires only one symptom from each of DSM-IV(-TR) PTSD Criteria B, C, and D (Table 2.1), plus impaired functioning (social, occupational, pursuit of a task) and at least three dissociative symptoms (see below). For adults and youth alike, however, researchers have found that the dissociative symptoms of ASD have added little to its power to predict ongoing difficulties (Kassam-Adams & Winston, 2004; Meiser-Stedman, Yule, Smith, Glucksman, & Dalgleish, 2005).

### *Dissociative Symptoms and Disorders*

Dissociative symptoms may occur as a part of ASD, PTSD (e.g., flashbacks, splitting of consciousness), or other specific disorders such as dissociative identity disorder (DID). Dissociative symptoms may be pathological or nonpathological (see Nader, in press). These symptoms have been examined as a set of symptoms on a continuum from extreme (e.g., separate identities) to innocuous (e.g., daydreaming), or as a completely separate construct that is inherently pathological (e.g., DID; Ogawa, Sroufe, Weinfield, Carlson, & Egeland, 1997; Putnam, 1997; Silberg, 1998). Pathological dissociation has been described as a disturbance in the integrative functions of identity, memory, and consciousness (APA, 1994, 2000; Putnam, Helmers, & Trickett, 1993). Although dissociative symptoms may occur without identifiable traumatic precursors, severe disorders such as DID in children and adolescents have often been attributed to severe stressors such as chronic physical and sexual abuse, or (in some cases) to repeated surgical procedures or imitation of family dissociative disorders (Silberg, 1998, 2004).

### *Complex Trauma*

Complex PTSD or DESNOS is most commonly associated with interpersonal, early, extreme, or prolonged stressors (APA, 1994, 2000; Pearlman, 2001; van der Kolk & Courtois, 2005). Although complicated traumatic reactions have been documented more frequently for such stressors (APA, 1994, 2000; Terr, 1991; van der Kolk et al., 2005), complex trauma has also occurred after later and single-incident traumas such as natural disasters (Nader, 1997; van der Kolk et al., 2005). The symptoms of complex trauma have been organized in more than one way (APA, 1994, 2000; Herman, 1992; Pearlman, 2001; van der Kolk, 2003; Williams & Sommer, 2002; Wilson, 2004). Herman (1992) arranged 27 symptoms of complex trauma into seven categories: dysregulation of or alterations in (1) *affect and impulses* (difficulties with affect regulation, risk taking, anger modulation, self-destructive behaviors, suicidal preoccupations, sexual modulation); (2) *attention and consciousness* (amnesia, transient dissociative episodes); (3) *self-perception* (guilt, shame, minimizing, feeling that nobody can understand, sense of ineffectiveness, feeling permanently damaged); (4) *percep-*

*tion of the perpetrator* (distorted beliefs about, idealization of, or preoccupation with hurting the perpetrator); (5) *relationships with others* (inability to trust, revictimization, victimizing others); (6) *somatization* (chronic pain, conversion symptoms, sexual symptoms, digestive disturbances, cardiopulmonary symptoms); and (7) *systems of meaning* (hopelessness or despair, loss of previously held belief systems) (van der Kolk et al., 2005). Briere and Spinazzola (2005) group complex trauma symptoms into the following overlapping categories: (1) *altered self-capacities* (dysfunctions in identity, affect regulation, and interpersonal relatedness); (2) *cognitive disturbances* (altered information processing or schemas associated with, e.g., low self-esteem, self-blame, helplessness, hopelessness, pessimistic expectations of loss, rejection, and danger); (3) *mood disturbances* (affective symptoms or disorders—anxiety, depression, anger, or aggression); (4) *overdeveloped avoidance reactions* (dissociation, substance abuse, suicidality, or tension reduction behaviors such as bingeing–purging and self-mutilation that distract or invoke stress-incompatible affect); and (5) *posttraumatic stress* (PTSD reexperiencing, avoidance/numbing, and arousal). The symptoms of altered self-capacities have been specifically linked with the symptoms of suicidality, impulse control problems, substance abuse, and tension reduction behaviors (Briere & Spinazzola, 2005).

## Other Disorders

Other and comorbid disorders are common for traumatized individuals (Nader, in press; see "Differential Diagnosis," below). Adults with a history of trauma have demonstrated dissociative, depressive, substance use, anxiety, personality, psychotic, and medical disorders (Gold, 2004; Kimerling et al., 2004; Krug, 1996) Disorders found in association with PTSD for youth are attention-deficit/hyperactivity disorder (ADHD), CD, depressive disorders (e.g., major depression or depressive disorder not otherwise specified), oppositional defiant disorder (ODD), phobic disorders (e.g., social or specific), and other anxiety disorders (e.g., separation anxiety disorder, panic disorder) (Carrion et al., 2002; Cicchetti, 2003; Ford, 2002; Greenwald, 2002; Udwin, Boyle, Yule, Bolton, & O'Ryan, 2000; Weinstein, Staffbach, & Biaggio, 2000; van der Kolk et al., 2005). For both youth and adults, substance use and eating disorders have been associated with childhood traumas (Pasquini, Liotti, Mazzotti, Fassone, & Picardi, 2002). The relationship between PTSD and other disorders can be bidirectional. For instance, depression is both a possible result of PTSD and a risk factor for the development of PTSD (Kimerling et al., 2004).

## Alterations in Information Processing

Trauma may alter categorization and interpretation of experience, including attention, expectations, and enactments toward self and others, as well as patterns of cognitive associations (Mash & Dozois, 2003; Nader, in press; van der Kolk, 2003; Yee, Pierce, Ptacek, & Motzelesky, 2005). [illegible] may engage in negative self-evaluations, set unrealistic and perfectionistic goals, believe that efforts to achieve goals are futile, or feel hopeless or pessimistic about the future (Hammen & Rudolph, 2003). Actions based on faulty information processing may result in reactions from others that confirm the faulty information processing (Caspi, 1998; Nader, in press).

### *Aggression*

The commission of violence has been indirectly and directly linked to exposure to violent and other traumas such as natural disasters (see Buchanan, 1998; Kohly, 1994; Nader, 1997, in press; Simmons & Johnson, 1998). In addition to its association with trauma, aggression has been correlated with traits, information-processing tendencies, neurochemistry, experience, and aspects of parenting and socialization (Aber, Brown, & Jones, 2003; Barry, Frick, & Killian, 2003; Dodge et al., 1995; Laird, Jordan, Dodge, Pettit, & Bates, 2001; Nader, in press; Scheff, 1997; Volkan, 2001). Temperamental characteristics and early experiences may set up anticipatory attitudes that affect behaviors and relationships (Caspi, 1998). Abused youth, for example, may perceive, interpret, and make decisions about social interactions that increase the likelihood of their aggressive acts (Crick & Dodge, 1996; Dodge et al., 1995). Overtly aggressive youth tend to make more hostile attributions, generate more aggressive responses, and more frequently expect rewards from aggressive problem solving (Crick, 1995).

### *Script-Like Reenactments*

Intense traumatic impressions become etched into a youth's memory following traumatic experiences (Terr, 1991). Multiple intensely registered impressions include, for example, the experience of an immobilized onlooker, a person in flight from danger, or a defender; horrible images, sounds, and physical sensations; and strong desires or compulsions to act—to intervene, rescue, fight back, attack the source of danger, or take other action (Nader, 1997; Nader & Mello, 2001; Pynoos & Eth, 1986; see Nader & Mello, 2001, for a more complete list). These impressions influence a traumatized youth's behavior toward and thinking about self and others. Consequently, in addition to the thoughts and images that may repeatedly intrude following traumatic events, traumatic impressions may replay behaviorally in repeated enactments of *trauma-related roles* or *trauma-engendered scripts* (Nader, in press). The attributional biases related to these scripts may include altered expectations of protection and the trustworthiness and personal value of self and others (Thomas, 2005). These script-like reenactments may play out across the lifespan in the roles of persecutor, rescuer, victim, immobilized witness, and comforter, among others (Ford, 2002; Liotti, 2004; Nader, in press; Nader & Mello, 2001).

### Neurobiological Changes

Research has documented reductions in brain volume and neurochemical changes following traumatic experiences (Bremner, 2003; De Bellis et al., 1999; Sapolsky, 2000). Such changes as a result of severe or prolonged trauma may have profound, compounding, and long-term effects on a child's life and development (Nader, in press). These neurobiological changes can affect cognitive, behavioral, and emotional functioning—"the way youths greet the world, function in it, interact with others, cope with adversity, and respond to life's challenges" (Nader, in press; see also Sapolsky, 1998).

## DIFFERENTIAL DIAGNOSIS: DISTINGUISHING PTSD AND ASD FROM OTHER CLINICAL DIAGNOSES

Overlapping symptoms among disorders may make differential diagnosis difficult (Table 2.1). The descriptions of Jake (Box 2.1) and Billy (Box 2.2) demonstrate the overlap in symptoms and the difficulty in determining a diagnosis (see Table 2.2). Exposure to an actual traumatic experience often helps to distinguish the anxieties of other disorders from those of simple or complex PTSD or ASD. For DSM disorders, a PTSD diagnosis, if possible, supersedes other diagnoses when symptoms are directly related to a DSM PTSD Criterion A experience.

### Adjustment Disorder

Adjustment disorder—clinically significant behavioral or emotional symptoms in response to one or more identified stressors—has been used when posttraumatic symptoms do not meet the specified algorithms for a PTSD diagnosis (one reexperiencing, three numbing/avoidance, and two arousal symptoms plus functional impairment) (APA, 1994, 2000; Cohen & Mannarino, 2004). As noted earlier, debate continues regarding the application of these algorithms to youth (Fletcher, 2003; Nader, in press; Scheeringa et al., 2001). Children with subsyndromal PTSD have demonstrated clinically significant traumatization (Carrion et al., 2002; Daviss et al., 2000; Nader, in press; Vila, Porsche, & Mouren-Simeoni, 1999). Future diagnostic criteria may take into account the differences across ages in the presentation of PTSD, the possibility of complex trauma without PTSD, and the developmental impact of individual symptoms and posttraumatic changes.

### Anxiety Disorders

PTSD is classified among the anxiety disorders in DSM-IV(-TR) and shares several symptoms with other anxiety disorders, although it can be distinguished from them in various ways. The anxiety associated with obsessive–compulsive disorder (OCD) includes such concerns as being contaminated, repeated doubts, a need to have things in particular order, aggressive or horrific impulses, or sexual

**TABLE 2.2. Differential Diagnosis**

| Symptom | Jake (age 10) | Billy (age 12) |
|---|---|---|
| Intrusive thoughts/other recollections | Games about killing others with a magic wand | Images of the shooter and others who were shot, the bullets coming toward him, the screaming . . . |
| Distressing dreams | Nightmares about being in danger | Nightmares of being shot at or being in other danger |
| Reenactment, reliving/ hallucination, or repetitive behaviors | | Repetitive aggressive behaviors in response to reminders of event |
| Recurrent psychological distress | Anxious in general; hyperventilates when stressed | |
| Somatic complaints | Stomachaches when stressed | Nausea in response to specific food odors |
| Avoidance of thoughts and feelings | Will not talk about distress; just does not answer questions | Sometimes just doesn't feel anything; goes to sleep when cannot avoid reminders of experience |
| Avoidance of activities, people, and places | Avoidance of all health care professionals | Will not go into the cafeteria at school |
| Diminished interest in activities | | |
| Restricted range of affect | Affect often blank or negative; is often angry | Lack of positive emotions |
| Sense of foreshortened future/ pessimistic outlook | Expects bad things to happen | Thinks he will not live to be 21 |
| Sleep disturbance | Must have covers tightly around him in order to sleep | Excessive sleep in the day; interrupted by nightmares at night |
| Irritability or outbursts of anger | Frequent angry outbursts; constant irritability; aggressive to family and peers | Impulsive reactivity; angry outbursts |
| Poor concentration | Concentration can be interrupted by anxieties | Impossible to concentrate for any length of time |
| Hypervigilance, excessive fear, or frozen watchfulness | Excessive fear; wariness toward others; cautions about being approached | Always watching to see if there is danger in his vicinity |
| Exaggerated startle response | | |
| Impaired functioning: academic, social, other | Social functioning is problematic; will not cooperate with medical practitioners | Impaired academic functioning; associates only with aggressive youth; does not have the concentration to work |
| Diagnosis | Sensory integration dysfunction; neurological tests pending | PTSD; complex trauma with antisocial and self-destructive behaviors |

*Note.* Table copyright 2006 by Kathleen Nader.

## BOX 2.1. Excerpts from the Case of Jake

### HISTORY

#### *Symptoms*

Jake has a history of aggression toward his family and sometimes toward his peers. He does not seem to have empathy for others. His parents describe him as stubborn, defiant, and uncommunicative. He sometimes angrily refuses to obey his parents. In contrast, after his sister goes to bed, he becomes a calm, likeable boy in the nurturing presence of his parents. He is fearful of being alone and fearful in general. When something triggers stress, he hyperventilates or has a stomachache. . . . His excellent intelligence can be interrupted by stress or an inability to concentrate or keep focus. He has frequent angry outbursts. He is cautious or angry toward others. . . .

Jake currently engages in poor self-care (e.g., does not want to brush his teeth). He is afraid of all health care practitioners and refuses to cooperate with them. . . . Jake cannot sleep at night unless the covers are tightly wrapped around him.

Jake's symptoms are exacerbated by noise or commotion. Rhythmic motion and music soothe him. . . .

#### *Family History*

Jake's parents are intelligent and caring caregivers. Both of his parents have a history of depression and anxiety. Jake's younger sister is charming and has a comfortable relationship with both parents. Although he is sometimes comfortable in dyads under nurturing circumstances, Jake's relationship with his family has been frequently strained. . . .

### PRESENTATION IN INTERVIEWS

Jake is an intelligent, attractive 10-year-old boy. . . . Jake appears to be very cautious with other people. He looks warily at individuals who enter his proximity. He is on alert when being approached. He often does not respond to greetings or to questions from others. . . . He tenses when approached and looks ready to fight or protect himself. . . . Jake sometimes behaves defiantly or with intense resistance. He exits when a situation no longer holds interest or reward for him. . . . He reports negative expectations of the future. . . .

### DIAGNOSIS

Jake's diagnosis on referral was sensory integration dysfunction. He responded well to occupational therapy that included methods of rhythmic activity and techniques that soothe or gather focus. . . .

Tests ordered: EEG, neurochemical tests

Rule out: ADHD, low-cortisol aggression

## BOX 2.2. Excerpts from the Case of Billy

### HISTORY

#### *Symptoms*

Billy's mother reports a history of aggression. He lashes out if anyone grabs an arm or a shoulder. Sometimes he just wants to fight someone. He has nightmares at night and falls asleep during the day. Billy was formerly a good student and a happy boy. Now he is in a special class because of his disruptive behavior and inability to concentrate or remember. He cannot eat in the school cafeteria because the smells of some foods make him nauseated. He is always aware of his surroundings and seems to need to know whether there is possible danger. . . . Teachers describe him as defiant now. . . .

#### *Event*

On a hockey day, Billy was in his hockey shirt like the other players. When he was walking down the hall, a boy came up to him, grabbed his arm, and yelled something like "You think you're so great, big hockey player!" Later Billy was in the cafeteria eating with the other players when the same boy came in with a gun and started shooting at the players. A few of the players had made fun of him on more than one occasion. Billy saw the first bullets hit his fellow players and saw the blood and tissue flying across the table. Billy saw the bullets coming toward him, almost as if in slow motion. He sat frozen at first and was jarred into action by the impact of the first bullet. He dove under the table. . . .

### DIAGNOSTIC INTERVIEWS

Billy is 12 years old. . . . Billy calmly stated that he did not need to see a shrink. He was quietly and resistantly cooperative at first. Then he seemed to relax and provided thorough information in response to questions. He said that he could not stand to think about the shootings. He just wanted to sleep. He said that he didn't feel anything most of the time, but must be angry because he just wanted to punch someone. He wanted to fight. . . . Billy is highly reactive in response to reminders of the event. When someone grabs his arm or shoulder the way the shooter grabbed him, he just swings at him or her. He doesn't think about it first; "it just happens." . . . "After the shooting, people were screaming and running and throwing up. I just can't go back in there without feeling sick to my stomach." . . .

### DIAGNOSIS

Inaccurate diagnosis: Conduct disorder

Accurate: PTSD

imagery (APA, 1994, 2000). However, OCD involves preoccupations produced internally (in the mind), in contrast to posttraumatic imagery, which arises from a traumatic experience. The repetitive thoughts of OCD are also often experienced by the individual as inappropriate (APA, 1994, 2000). In OCD, repetitive thoughts and actions that constitute compulsions are engaged to counteract recurrent thoughts, actions, images, or impulses (obsessions) (McNally, 2001). By contrast, posttraumatic cognitive, behavioral, or physiological repetitions reproduce aspects of the traumatic experience, are a part of reexperiencing the trauma, and may include attempts to process or master aspects of the experience (Horowitz, 1975).

Separation anxiety disorder (SAD) may follow traumatic exposure and may accompany PTSD or ASD. That is, youth may develop intense worry about being away from home or family (APA, 1994, 2000; Nader & Pynoos, 1993). When they occur posttraumatically, these fears may reflect fear about a recurrence of the trauma and ongoing concerns about personal safety (Pynoos & Nader, 1988; Shaw, 2000).

The phobic-like fears and avoidances associated with PTSD can be distinguished from phobic disorders, in that PTSD follows a specific stressor event and includes additional symptoms of avoidance and numbing, reexperiencing, and arousal symptoms (APA, 1994, 2000). Things feared or avoided are directly linked to the trauma or the time leading up to or following it. Following traumatic experiences, youth may avoid social situations for a number of reasons: because (1) stimuli (e.g., noise, motion, emotion) become overwhelming; (2) youth feel unsafe in crowds or away from caretakers; (3) people remind the youth of the traumatic experience and thus cause distress; (4) youth feel humiliated or embarrassed because of having been victimized or because of traumatic injuries; (5) trust or self-esteem has been damaged; or (6) irritability or anger makes relationships difficult. Fear of possible humiliation is prominent in social phobia (APA, 1994, 2000), but in PTSD or ASD, fear of humiliation is related to the traumatic experience or engendered by it through altered information processing.

### Somatoform Disorders

Members of some cultures (e.g., Asian or Hispanic cultures) may present with somatic complaints rather than other symptoms of trauma (Kinzie, Boehnlein, & Sack, 1998; Pole et al., 2005; Shiang, 2000). In contrast to somatization disorder, the physical complaints associated with trauma occur among other anxieties and symptoms (with some cultural exceptions). Depression, anxiety, somatic complaints, and psychotic-like behaviors (for dissociative or disorganized youth) may occur in combination among traumatized youth (Cohen & Mannarino, 2004). Pain symptoms are common to depressive, anxiety, and psychotic disorders (APA, 1994, 2000). For pain disorder, in contrast to PTSD and other disorders, pain or multiple physical complaints are an independent clinical focus. The neurobiology of extreme stress can inhibit immune functioning (Sapolsky, 1998). In all cases, actual medical disorders must be ruled out in the process of diagnosis.

### Dissociative Disorders

As discussed earlier, dissociative symptoms may accompany PTSD, are possible in complex trauma, and are essential to ASD. Dissociative symptoms occur as aspects of other disorders and circumstances as well. Dissociative symptoms and disorders such as amnesia, for example, may occur as a result of medical disorders, substance use, seizure disorders, or brain injury. DID has often been linked to severe and repeated traumas (Silberg, 1998). For DID, it may be necessary to distinguish between the existence of separate identities and auditory hallucinations (e.g., in schizophrenia) or the shift between cyclical mood states (e.g., in bipolar disorders).

### Psychotic Disorders

Under particular conditions, severely traumatized youth may be likely to display transient psychotic symptoms (Cohen & Mannarino, 2004). Severely abused or incarcerated and tortured youth, for example, may display psychotic symptoms when frightened by being restrained on an inpatient psychiatric unit. Dissociative symptoms such as disorganized behavior, flat affect, and social withdrawal may have a similar presentation to psychotic disorders.

### Disruptive Behavior and Impulse Control Disorders

The impulsiveness common to ADHD, CD, ODD, and PTSD may reflect neurochemical commonalities. Moreover, ADHD and traumatic reactions have some symptoms in common. Indeed, a diagnosis of ADHD can be misdiagnosed PTSD (Greenwald, 2002). Traumatization may also include difficulties concentrating, fidgeting, impatience, difficulty delaying responses, and disruptive behaviors. Fidgetiness and difficulty sitting still may reflect posttraumatic jumpiness, nervousness, and hypervigilance. Both disorders may include disturbed sleep patterns. Difficulties with impulse control and intermittent explosive behaviors may occur following traumas. Impulse control disorders are not diagnosed when the impaired impulse control is an aspect of PTSD (APA, 1994, 2000).

Youth with CD violate the rights of others or major societal age-appropriate norms or rules (APA, 1994, 2000). Several studies suggest an association of traumatization with CD and ODD (Ford, 2002). The two disorders have symptoms in common with PTSD. Like youth with CD, previously well-behaved youth who have been traumatized may exhibit bullying or threatening behaviors, initiate fights, engage in other aggression, and otherwise violate rules and norms. Like youth with ODD—which involves limit testing, disobedience, defiance, negativity, and hostility toward authority figures (APA, 1994, 2000)—traumatized youth may exhibit defiance, easy loss of temper, quick annoyance, anger, resentfulness, negativity, hostility, and verbal aggression. Ford (2002) points out that posttraumatic oppositional refusal to follow rules or engage in particular activities may reflect the persistent posttraumatic avoidance of reminders of the trauma.

### Sleep Disturbances

Sleep disturbances occur as associated symptoms of a number of disorders, such as mood or anxiety disorders (APA, 1994, 2000). If the sleep disturbance associated with PTSD becomes severe enough, it may be included as a separate diagnosis. Sleep disturbances may contribute to other symptoms, such as deficits in concentration, memory, energy, feelings of well-being, motivation, and mood, as well as increases in clumsiness, fatigue, and malaise (APA, 1994, 2000; Nader, in press). A diagnosis of nightmare disorder is not applied separately if nightmares occur as symptoms of PTSD. Adults have experienced a reduction of other trauma symptoms after treatment for nightmares (Krakow, Hollifield, et al., 2001). Similar treatment of a small group of adolescents reduced nightmares but did not diminish concurrent symptoms (Krakow, Sandoval, et al., 2001).

### Personality Disorders

Although personality disorders are not diagnosed for this age group, they have been identified among the long-term consequences of childhood trauma (Herman, 1992; Krug, 1996). A personality disorder (PD) "is an enduring pattern of inner experience and behavior that deviates markedly from the expectations of the individual's culture, is pervasive and inflexible . . . and leads to distress or impairment" (APA, 1994, p. 629). Recognition of the early signs and symptoms of such disorders may assist preventive interventions. Care must be taken in interpreting behaviors, however, because (1) a dimensional, rather than a categorical, perspective suggests that PDs represent maladaptive variations of personality traits, and (2) symptoms otherwise associated with PDs are reasonably expectable following exposure to traumatic events. The distrust and suspiciousness of paranoid PD; the social detachment and restricted range of affect common to schizoid PD; the impulsivity and instability of affect, self-image, and relationships associated with borderline PD; the hypersensitivity to negative evaluation, feelings of inadequacy, rigidity, and social inhibition linked to avoidant PD; the clinging and submissiveness of dependent PD; and the obsessive thoughts and need for control associated with obsessive–compulsive PD can occur following exposure to traumatic events (APA, 1994, 2000; Price & Lento, 2001). Because of the overlap in symptoms, DSM (APA, 1994, 2000) advises caution in using PD diagnoses during an episode of a mood or anxiety disorder.

## ASSESSMENT MEASURES

This section provides brief descriptions of a number of the trauma assessment measures that include PTSD and additional symptoms found for children. Measures continue to be updated as information about childhood trauma increases. Most scales and interviews include associated scales or items to assess exposure and additional trauma-related difficulties. The scales presented here have good or acceptable psychometric properties and are discussed in more detail in Nader (in press). Those that assess multiple disorders generally assess the symptoms of all DSM disorders. The trauma scales described here include a more thorough examination of trauma-related symptoms, in addition to those identified for the DSM adult disorder. Trauma scales that assess only DSM-IV PTSD without additional symptoms may miss some of the symptoms important to treatment.

### Preschool Children

Parent report scales that address trauma in preschool children are presented here.

*The PTSD Semi-Structured Interview and Observational Record for Infants and Young Children* (PSIOR; Scheeringa & Zeanah, 2005) elicits reports from parents of children under the age of 6. Version 1.4 includes traumatic exposures and developmentally sensitive trauma items for children less than 48 months old. Items focus on observable behaviors. Observation of a child during the caregiver interview provides supplemental information (Scheeringa et al., 2003). The interview permits a diagnosis either by the DSM-IV PTSD algorithm or by proposed alternative algorithms (Scheeringa et al., 2003).

*The Preschool Age Psychiatric Assessment* (PAPA; Egger, Ascher, & Angold, 2002) is a structured parent or guardian interview that collects developmentally relevant symptoms and impairment information on a variety of disorders, including trauma/PTSD. The parent interview includes subsections for background and symptom information, disorders found in young children, life events, and PTSD A events (stressor events occurring in the last 3 months), and PTSD B events (lifetime major traumatic events). Psychiatric diagnoses are generated by computerized algorithm after the interview.

*The Trauma Symptom Checklist for Young Children* (TSCYC; Briere, 2005) is a 90-item caretaker report measure developed to assess trauma-related symptoms in children ages 3–12. The TSCYC asks about observable behaviors. Two validity scales determine Atypical Responses (overreporting) and Response Level (underreporting). A DSM-IV PTSD diagnosis is possible from the parent scale. Normative data are available for gender and age subgroups (3–4, 5–9, and 10–12 years).

### School-Age Youth

Described below are youth self-report scales that assess PTSD and other posttraumatic symptoms (see Nader, in press, for more details). In addition to these scales are those that assess multiple disorders, such as the Missouri Assessment of Genetics Interview for Children (Reich & Todd, 2002); the K-SADS (Puig-Antich & Chambers, 1978); and the Child and Adolescent Psychiatric Assessment (Angold, Cox, Prendergast, Rutter, & Simonoff, 2000). In individual clinical interviews, rapport building should precede the use of assessment measures. Among rapport-building methods are (1) the demonstrated sanction of caretakers and, when applicable, those in authority (such as teachers or school administrators); (2)

introduction of the clinician as one who works with children who have been through something like the traumatic event, or one who works with children like the youth; (3) the genuine interest and responsiveness of the interviewer; and (4) draw-a-picture, tell-a-story techniques.

*The Child Posttraumatic Stress Reaction Index* (CPTS-RI; Frederick, Pynoos, & Nader, 1992) is a 20-item scale, and the Additional Questions for this scale (Nader, 1999a) include 11 main questions (and 48 probe or clarification questions) (Nader, 1993, 1999b). Although the CPTS-RI will remain available to provide a trauma level that correlates well with DSM-IV PTSD, the 1992 scale is a precursor to scales under development by Nader and Fletcher that will be available in 2007. The revised scales will include DSM-IV-TR PTSD, additional symptom, and complex symptom subscales for diagnoses of PTSD, ASD, complex trauma, developmental trauma, faulty information processing, and other posttraumatic symptoms or impairments.

*When Bad Things Happen* (WBTH; Fletcher, 1991) assesses DSM-IV PTSD, DSM-III-R PTSD, and associated symptoms. A rating scale with a coding key accompanies the WBTH, assisting computation of the DSM-III-R or IV diagnosis or a continuous score. A computer-scoring program, and a tape to assist younger children and those with reading difficulties in completing the instrument, are also available.

*The Children's Impact of Traumatic Events Scale–2* (CITES-2; Wolfe & Gentile, 2003) includes DSM-IV PTSD diagnostic criteria and additional items. The CITES-2 permits the examination of sexually abused and other traumatized children; it assesses trauma factors, social reactions, sexual concerns, attributions (based on learned helplessness theory), and other subjective responses (e.g., loss of friends, being made fun of by others, loss of faith in adults, distrust). It also includes symptoms common to more complicated forms of PTSD. Many of the additional symptom questions are worded specifically for sexual abuse.

## CONCLUSIONS

PTSD captures only a part of posttraumatic psychopathology in youth. A number of comorbid disorders, symptoms, and patterns of thought and behavior other than those described in the diagnostic criteria of PTSD occur for youth and may increasingly disrupt life across time. A number of risk and resilience factors may affect youth's traumatic reactions. Aspects of a youth as an individual, his or her background and environment, his or her individual traumatic experience and history, and the manner of assessment may interact or transact in determining the youth's reactions to adversity. There is a great deal of overlap in symptoms for the disorders of youth. PTSD and ASD are distinguished from other disorders by exposure to a Criterion A stressor event and by symptoms that relate directly to or are colored by the event. Assessment of youth must examine multiple factors and the symptoms in addition to PTSD that may occur for youth.

## Study Questions

1. What are the differences between DSM-IV(-TR) PTSD and complex PTSD? Why are they important?
2. Do you think that Billy (Box 2.2) has complex trauma? Why or why not?
3. What are risk and resilience factors? Name commonly recognized ones.
4. Which symptoms of PTSD overlap with other disorders? Why doesn't Jake (Box 2.1) receive a diagnosis of PTSD?
5. Obtain one of the scales described in this chapter, and interview a classmate about a bad experience.

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