Children’s Measure of Obsessive-Compulsive Symptoms (CMOCS)
The Children's Measure of Obsessive-Compulsive Symptoms (CMOCS) is a 56-item self-report scale designed to assess obsessive and compulsive behaviors (actions as well as thoughts) and their impact on children and adolescents between the ages of 8 and 19 years. The CMOCS is a time-efficient instrument that provides objective assessment and quantification of the subjective experience of children and adolescents with both overt and covert behavior problems related to obsessions or compulsions at either a subclinical or clinical level. Thus, although it can be particularly useful for evaluating those suspected of having Obsessive-Compulsive Disorder (OCD) or related disorders, it is also intended to be used for assessing problematic obsessions or compulsions in those without clinical diagnoses, but whose behaviors interfere with some key life function, such as schooling or social development. Sometimes these behavioral and emotional problems co-occur with disorders such as Tourette's Disorder or Attention-Deficit/Hyperactivity Disorder (ADHD). In such cases, identifying comorbid obsessions or compulsions may be important in understanding and treating the primary disorder. Sometimes the symptoms exist independently of any fully emerged clinical syndrome, yet they interfere with a child's or adolescent's daily life and require attention from a clinician independently.

This chapter provides an introduction to the CMOCS. First, a brief description of the test materials is provided. (A comprehensive description of the materials and the administration and scoring procedures can be found in chapter 2.) Next, potential applications and appropriate use of the CMOCS in clinical, school, and research settings are described. Because the CMOCS can assist in diagnosing OCD, an overview of OCD and obsessive-compulsive symptoms in children and adolescents follows. It should be noted, however, that the CMOCS is not designed to be a stand-alone diagnostic measure for OCD; such diagnosis should be done only in the context of a comprehensive psychological evaluation that includes clinical interviews, a developmental history, observation, and broadband behavior rating scales. The chapter ends with brief discussions of critical diagnostic issues and existing assessment procedures for evaluating the presence of obsessions or compulsions, as well as a summary of CMOCS features.

What Is the CMOCS?

The CMOCS consists of a 56-item AutoScore™ Form (WPS Product No. W-468A) that asks about obsessions, compulsions, and daily functioning. The form can be administered individually or in groups. The child or adolescent responds to each item on a Likert-type scale with response choices of Never, Sometimes, Often, and Almost Always. The items are easy to read. With a Flesch-Kincaid reading index value of 2.6, they generally can be read and understood by anyone who reads at a mid-second-grade level or higher. Most respondents complete the scale in approximately 10 to 15 minutes. Scoring usually takes 10 minutes or less. A detailed description of the scoring procedures is given in chapter 2.

The CMOCS produces the scores listed in Table 1. Two Summary scores are provided—a Total score and an Impact score. There are also six Problem Area scores—Fear of Contamination, Rituals, Intrusive Thoughts, Checking, Fear of Mistakes and Harm, and Picking/Slowing. In addition, an Inconsistent Response index and a Defensiveness score are provided as measures of response validity. All of the scores except the Inconsistent Response index score are standard scores and are based on a sample of 1,644 children and adolescents aged 8 years to 19 years with demographic characteristics similar to those in the U.S. population at large. Complete information on the development and norming of the CMOCS is provided in chapter 4.

CMOCS scores are highly reliable. The internal consistency estimate for the Total score is .94, with a retest reliability estimate of .95. For the Impact score and Problem Area scores, internal consistency estimates range from .70 to .81 (median = .79), and retest reliability estimates range from .78 to .94 (median = .88). Validity of the interpretation of the scores as reflecting specified problem behaviors also has been examined through expert consensus, scale structure, correlations with concurrent measures, and score patterns for a variety of clinical groups. In all, the development of the CMOCS and examination of its
psychometric properties were based on a highly diverse sample of 2,666 children and adolescents from clinical and nonclinical settings. The psychometric properties of the CMOCS are discussed in detail in chapter 5.

**Applications of the CMOCS**

The assessment of child and adolescent problems should incorporate self-report measures whenever possible. This is particularly important with regard to internalizing disorders such as mood and anxiety disorders, including problems associated with OCD-related behaviors. Research has shown that children tend to report higher levels of OCD-related symptoms than their parents and that disagreement concerning the existence of symptoms of OCD, especially mental symptoms such as obsessive thinking, is fairly common (Langley, Bergman, & Piacentini, 2002). If a clinician suspects a constellation of OCD problem behaviors in a child or adolescent, the CMOCS will be a valuable aid both in confirming or ruling out the presence of obsessions and compulsions and in understanding the child’s experience of his or her symptoms.

**Clinical Settings**

The CMOCS is a useful adjunct to diagnosing children and adolescents in clinical settings, in part because the development of CMOCS items was anchored in *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition—Text Revision* (DSM-IV-TR; American Psychiatric Association [APA], 2000) criteria for the presence of OCD and informed by recent advances in diagnostic research. It is also compatible with other diagnostic systems. There are numerous other features of the CMOCS that make it particularly well suited for helping clinicians make diagnostic decisions.

**Norm-referenced interpretation.** Because the CMOCS produces norm-referenced scores, the clinician can compare a child’s self-report of problematic obsessions and compulsions to that of his or her peers. Since subclinical obsessive-compulsive symptoms are relatively common in children and adolescents, it is particularly important for clinicians to have norm-referenced scores to determine whether the level of reported symptoms can be considered clinically significant. Norm-referenced interpretation also allows one to detect levels of problems that indicate a need for preventive or early intervention efforts.

**OCD and comorbid conditions.** The CMOCS can be a useful component of a primary diagnostic evaluation for the presence of OCD. In addition, because numerous disorders of childhood and adolescence have high rates of comorbidity with OCD, the measure is useful as a routine part of any general diagnostic battery. When a child or adolescent presents with multiple disorders, the disorder with the more visible or disruptive symptoms might hinder the diagnosis of a disorder with less noticeable symptoms. For example, ADHD has a high comorbidity rate with OCD. It is easy to see how the immediate need to cope with overt symptoms of ADHD—such as hyperactivity, distractibility, and impulsivity—might lead to neglecting assessment for the less visible symptoms of OCD when they are present. Given the large number of disorders with which OCD symptoms are likely to coexist, an objective and

<table>
<thead>
<tr>
<th>Scale/Score</th>
<th>Number of items</th>
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<tbody>
<tr>
<td><strong>Validity scales</strong></td>
<td></td>
</tr>
<tr>
<td>Inconsistent Responding (INC) index</td>
<td>13 pairs</td>
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<tr>
<td>Defensiveness (DEF)</td>
<td>56</td>
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<tr>
<td><strong>Summary scores</strong></td>
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<tr>
<td>Total score (TOT)</td>
<td>56</td>
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<tr>
<td>Impact score (IMP)</td>
<td>11</td>
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<td><strong>Problem Area scales</strong></td>
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<tr>
<td>Fear of Contamination (CONTAM)</td>
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<td>Rituals (RIT)</td>
<td>11</td>
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<td>Intrusive Thoughts (INT)</td>
<td>9</td>
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<td>Checking (CHK)</td>
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<td>Fear of Mistakes and Harm (FEAR)</td>
<td>10</td>
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<tr>
<td>Picking/Slowing (PKSLO)</td>
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| Table 1                                      |
|----------------------------------------------|-----------------|
| **Scales Scored on the CMOCS**               |                 |
| **Scale/Score**                              | **Number of items** |
| **Validity scales**                          |                 |
| Inconsistent Responding (INC) index          | 13 pairs        |
| Defensiveness (DEF)                          | 56              |
| **Summary scores**                           |                 |
| Total score (TOT)                            | 56              |
| Impact score (IMP)                           | 11              |
| **Problem Area scales**                      |                 |
| Fear of Contamination (CONTAM)               | 12              |
| Rituals (RIT)                                | 11              |
| Intrusive Thoughts (INT)                     | 9               |
| Checking (CHK)                               | 8               |
| Fear of Mistakes and Harm (FEAR)             | 10              |
| Picking/Slowing (PKSLO)                      | 6               |
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quantitative evaluation of OCD symptoms should be included routinely when childhood emotional and behavioral disorders are assessed.

**Improving intervention planning.** Although diagnostic labels are helpful in describing a case, a thorough assessment of symptoms should guide intervention. Since the CMOCS produces multiple scores, it is possible for the clinician to detect different symptom patterns. For example, one child might report obsessions and compulsions, but indicate that they have minimal impact on his or her daily functioning, as reflected on the Impact scale. Another child might report comparable levels of obsessions and compulsions, but report clinically significant impairment in daily functioning. While most children and adolescents with OCD experience both obsessions and compulsions, the CMOCS can also identify those clients with only obsessions or only compulsions. The CMOCS Total score may be useful for screening, but an examination of all scales is recommended to obtain a full picture of the symptom presentation. In this way, the clinician is able to target interventions to address the specific symptoms reported by the child.

**Monitoring symptoms.** In addition to facilitating diagnosis and treatment planning, the CMOCS is a fairly brief instrument and can be administered periodically during an intervention program to monitor symptom change.

**School Settings**

The features of the CMOCS that make it well suited for clinical applications also make it useful in schools. The CMOCS will prove useful in numerous school-based applications, as described in the following sections.

**Emotional disturbance.** School psychologists charged with assessing students to determine if they meet the IDEA 2004 criteria for emotional disturbance will find the CMOCS a valuable diagnostic instrument. IDEA 2004 Part B regulations (available at http://idea.ed.gov/download/finalregulations.html) state:

(c)(4)(i) Emotional disturbance means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child’s educational performance:

(A) An inability to learn that cannot be explained by intellectual, sensory, or health factors.
(B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
(C) Inappropriate types of behavior or feelings under normal circumstances.
(D) A general pervasive mood of unhappiness or depression.
(E) A tendency to develop physical symptoms or fears associated with personal or school problems.

(ii) Emotional disturbance includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance under paragraph (c)(4)(i)...

Since obsessive-compulsive problems are often chronic and can significantly interfere with school performance, students who have them may qualify for special education services. Based on IDEA 2004 criteria, a student with obsessions or compulsions would likely meet criterion (C), “inappropriate types of behavior or feelings under normal circumstances,” or (E), “a tendency to develop physical symptoms or fears associated with personal or school problems.”

**Individualized education programs (IEPs).** Since the CMOCS identifies specific symptoms and problems reported by the student, it may be helpful when developing IEPs for students with emotional disturbance.

**Manifestation determination.** A manifestation determination is a process whereby a committee determines if a student’s misbehavior is the direct result of a disability (e.g., emotional disturbance). If the child’s behavior is the manifestation of his or her disability, he or she should not be subject to disciplinary action. For example, a child who engages in compulsive washing behavior might spend excessive time in the bathroom and receive a disciplinary sanction. If the committee determines that the excessive time spent washing was a manifestation of the disability and not simply oppositional behavior, the child would not be subject to disciplinary action.

**Response to intervention model.** If a clinician is using a response to intervention model in the schools, the CMOCS lends itself to establishing a baseline as well as evaluating the student’s responsiveness to whatever interventions have been put into place. The Impact scale is particularly useful in assessing the practical effects of interventions with children with OCD symptoms.

**Forensic Settings**

The CMOCS is appropriate for use in legal settings when a quantitative measure of obsessive-compulsive symptoms is relevant. Influential court rulings, such as the widely applied *Daubert v. Merrell Dow Pharmaceuticals* (1993), require that tests used in forensic settings have sufficient evidence available regarding their psychometric properties. This manual provides adequate evidence of the reliability of the CMOCS scores as well as information about the standardization procedures and initial validity studies. Judges also consider accepted nonforensic applications of an instrument in deciding upon its admissibility in legal proceedings. The CMOCS is designed to meet accepted standards in the applied settings of clinical and school psychological practice. The availability of validity scales to measure biased responding further enhances the suitability of this instrument for use in forensic settings.

**Research**

The CMOCS holds great promise for use in research. The strong normative sample provides good evidence of the baseline of obsessions and compulsions in the population of children and adolescents in the United States. Thus the measure can provide appropriate comparisons for individual
children as well as for large groups of individuals in studies of treatment effectiveness or in epidemiological investigations. The CMOCS also may serve as a screener in large-scale clinical studies where there is a need to identify subgroups of participants with different types of obsessions or compulsions or different levels of impact of those problems on daily functioning.

**OCD in Children and Adolescents**

OCD is a psychological disorder characterized by obsessions and/or compulsions. Obsessions are intrusive and recurring thoughts, urges, or images that cause significant anxiety or distress (DSM-IV-TR). The most common obsessions in children and adolescents are fears of contamination, harm, and death. Other common obsessions involve the need for symmetry or exactness and somatic, religious, or sexual concerns (March, Franklin, Leonard, & Foa, 2004; Shafran, 2001). Compulsions are recurring physical or mental acts that are used to reduce anxiety or avoid a feared event. The most common compulsions in children and adolescents are repeated cleaning, checking, touching, and straightening (March et al.; Shafran).

It should be noted that in spite of the disorder’s name, diagnosis of OCD requires that either obsessions or compulsions be present, but not necessarily both. The symptoms must be severe enough to cause marked distress, cause impairment in functioning, or consume considerable time (e.g., requiring more than 1 hour a day). Although adults with OCD are expected to recognize that the obsessions or compulsions are unreasonable or excessive, this is not expected with children because they may lack the insight and judgment to be aware of this distinction. While many individuals may have some recurring thoughts, minor rituals, and the like, when the frequency or severity of these experiences causes distress or interferes with the activities of daily living, they rise to the level of the diagnosable disorder known as OCD. Early recognition of such symptoms provides an appropriate opportunity for preventive action.

The majority of children with OCD do, in fact, present with both obsessions and compulsions (Hanna, 1995). The compulsions are typically linked to the obsessions and serve to reduce anxiety or distress. For example, a child with obsessions focusing on fear of contamination, such as fear of dirt and germs, might engage in compulsive behaviors such as excessive cleaning and washing to avoid contamination. The compulsive cleaning and washing might be so extreme that they consume several hours a day and leave the child’s skin continually irritated and raw. Some children become so fearful of embarrassment over their obsession that they may begin to isolate themselves from others to hide their behaviors. These children may avoid group activities, participating in organized athletics, sleepovers with friends, or trips with anyone other than their parents. They often experience problems with schooling and may even become school phobic.

Obsessive and compulsive behaviors often have a significant impact on the functioning of children and adolescents. This is particularly noticeable at home, where compulsions and rituals frequently interfere with family plans and functioning (Albano, Chorpita, & Barlow, 1996; Valderhaug & Ivarsson, 2005). Functional impairment is also common in other settings. For example, children with OCD often have difficulty concentrating and completing schoolwork. Excessive grooming and checking behaviors can make children late to school or interfere with school attendance (Valderhaug & Ivarsson). As a result, their school performance might suffer (DSM-IV-TR). OCD-related impairment also extends to social domains. For example, elaborate grooming and nighttime rituals might prevent sleepovers with friends (Valderhaug & Ivarsson). In adolescents, symptoms might interfere with activities such as driving, dating, and working. Older adolescents might also have difficulty separating from home and leaving for college (Albano et al.). A teacher related a case to the authors describing a preteen girl who could open doors only if she placed her fingers on the doorknob in the exact same position every time and exerted an equal amount of pressure with each finger. When she judged she had misplaced her fingers or used unequal amounts of pressure, she would repeat the placement of her hand on the doorknob until she got it exactly right. This sometimes took an hour or more, so she could not be sent anywhere alone where doors had to be opened—someone had to accompany her to open doors for her. This created much embarrassment and was a particular problem with bathroom use at school and other public settings. When her parents left early for work, she was occasionally absent and often tardy for school because she spent so much time trying to open the door correctly when leaving home in the morning.

Prevalence estimates based on community studies of children and adolescents indicate a 1% to 3% lifetime prevalence rate for OCD (APA, 2000; Shafran, 2001; Zohar, 1999). It is reasonable to conclude that approximately 2% of children meet the current diagnostic criteria for OCD. In the public schools, this translates into one child in every two classrooms, on average. For children and adolescents, the average age of onset is approximately 10 years (Geller et al., 1998; Swedo, Rapoport, Leonard, Lenane, & Cheslow, 1989). Related research indicates that between 30% and 80% of adults with OCD report their symptoms began before the age of 18 years (Pauls, Alsobrook, Goodman, Rasmussen, & Leckman, 1995; Rasmussen & Eisen, 1992). The age of onset typically is earlier for boys than for girls (Zohar). However, by adulthood there is an approximately equal number of males and females with OCD. The course of childhood OCD is typically chronic, but with the severity and frequency of problematic behaviors fluctuating over time. Increases in symptoms are often stress-related. Approximately 15% of patients with OCD show progressive
deterioration in functioning, while approximately 5% have minimal or no symptoms between episodes (DSM-IV-TR). Complete remission occurs in only approximately 10% to 15% of cases (Zohar).

The cause of OCD is uncertain, but most contemporary etiological models hypothesize a neurobiological basis. That is, there is some biological abnormality in the nervous system that is associated with OCD symptoms, and the advent of effective psychopharmacological interventions for OCD supports such a conclusion. Different researchers have focused on different neurological structures, but at this time there is no specific model that has received widespread acceptance (see March et al., 2004, for a review). There are also cognitive-behavioral models that have been developed to explain OCD, and cognitive behavioral therapies also are effective in the treatment of OCD. These models have been developed and studied largely with adult populations, with less research done with children and adolescents (Shafran, 2001). One subgroup of childhood OCD deserves special mention because it is the focus of considerable discussion in the research literature: pediatric autoimmune neuropsychiatric disorders associated with streptococcal infections (PANDAS). PANDAS is diagnosed when a client presents with (a) childhood onset of OCD or tic symptoms, (b) sudden onset or an episodic course, (c) a temporal relationship between symptom exacerbations and streptococcal infections, and (d) neurological deficits that are present during OCD symptom exacerbation (Snider & Swedo, 2004).

With regard to intervention, an approach based on cognitive-behavioral therapy (CBT) alone or combined with medication is recommended. Research into the relative effectiveness of behavioral intervention versus medication is ongoing but suggests that CBT-based interventions may provide the most durable benefit. For young children, or those with mild forms of problem obsessions or compulsions, CBT-based intervention may be particularly useful. In school settings, when problematic obsessions or compulsions are present at levels that that do not result in a high level of dysfunction, but nonetheless do interfere with schooling, supports or accommodations should be designed with relevant CBT principles in mind. Although in the past a variety of psychodynamic, family, and supportive approaches to intervention have been used with children and adolescents who have problematic obsessions or compulsions, research has failed to support the efficacy of these interventions (see March et al., 2004, for a review).

**Issues Related to Diagnosing OCD**

Although it is not intended to function as a stand-alone diagnostic measure, the CMOCS provides assistance in clinical diagnosis of OCD because it was developed with clinical diagnostic criteria in mind. The measure asks about both the presence of obsessions or compulsions and their impact on the child’s or adolescent’s daily functioning, the essential features of OCD for children and adolescents that have already been described. Often, however, obsessions or compulsions are experienced as part of a clinical disorder other than OCD. For example, if a child has an eating disorder, he or she may have obsessions and compulsions that are focused on food and eating. OCD would be diagnosed in such a case only if obsessive or compulsive symptoms were evident in other areas besides food and eating. OCD demonstrates a high rate of comorbidity with numerous psychiatric disorders, including Learning Disorders, ADHD, and Oppositional Defiant Disorder; Body Dysmorphic Disorder and Eating Disorders; Anxiety Disorders such as Specific Phobia, Overanxious Disorder, and Separation Anxiety Disorder; and Mood Disorders. There is a particularly high rate, 35% to 50%, of OCD in children with Tourette’s Disorder, and between 20% to 30% of people with OCD report past or current tics (DSM-IV-TR; Shafran, 2001). Obsessions or compulsive behavior may also be observed as a result of a medical disorder or the effects of a substance, either a medication or a drug of abuse.

There are additional factors that make the diagnosis of OCD in children and adolescents a complicated process. For instance, it is often difficult to distinguish early symptoms of OCD from developmentally normal behavior. In other words, obsessions and compulsions must be differentiated from concerns, rituals, and superstitions that are developmentally appropriate. For example, many children arrange their toys in a specific order and develop nighttime rituals with parents. These normal rituals and concerns are not excessive, do not interfere with normal functioning, differ in content from pathological obsessions/compulsions, and usually abate by 9 years of age (Albano et al., 1996; DSM-IV-TR).

It is also common for children and adolescents who do not meet the clinical criteria for OCD to report some obsessive-compulsive symptoms. While obsessive-compulsive symptoms are relatively common in a normal population, they are usually not excessive and do not result in marked distress or impaired functioning. To illustrate this, in one large-scale study of adolescents, only 18% of respondents reported no obsessive-compulsive symptoms. While only 2.3% of the sample met the diagnostic criteria for OCD, a large number of the adolescents endorsed items reflecting excessive concern about neatness (72%), engaging in rituals (34%), and hoarding behavior (29%); Apter et al., 1996). This suggests that many children and adolescents who do not meet the full diagnostic criteria for OCD experience some obsessive-compulsive symptoms. These findings make the use of a norm-referenced self-report measure such as the CMOCS particularly important when diagnosing OCD in children and adolescents.

OCD symptoms may go undetected for years. Some children may be embarrassed and reluctant to report symptoms of OCD (Shafran et al., 2003). Other children may fail to view their OCD symptoms as problematic and
not request help. Additionally, children (like adults) tend to engage in compulsive behaviors more at home than in front of teachers, peers, or others. As a result of these factors, OCD in children is typically first recognized by parents when the symptoms begin to interfere with family or school functioning (Albano et al., 1996; DSM-IV-TR).

The quantification of the presence of various symptoms and the characteristic impact associated with obsessions and compulsions may help to address these diagnostic complications. It is hoped that the availability of the CMOCS will contribute to an increase in the accurate identification of OCD, as well as other symptom presentations, so that appropriate treatment can be undertaken most effectively. This is in keeping with current movements in emotional and behavioral disorders toward dimensional diagnosis and away from categorical diagnosis (e.g., see Kamphaus & Campbell, 2007).

Existing Assessments for Child and Adolescent Obsessive-Compulsive Symptoms

To date, the diagnosis of OCD in children and adolescents has relied primarily on clinical interviews, broad-based behavioral rating scales completed by teachers and parents (e.g., Behavior Assessment System for Children, Second Edition [BASC-2], Teacher Rating Scales [TRS] and Parent Rating Scales [PRS], Reynolds & Kamphaus, 2004), and omnibus self-report scales (e.g., BASC-2 Self-Report of Personality, Reynolds & Kamphaus). However, none of these measures has a scale specific to OCD symptoms, although they typically contain a scale that assesses anxiety in general. Omnibus behavior rating scales and omnibus self-report scales have not produced definitive diagnostic profiles for child and adolescent OCD, perhaps due to the specific nature of the symptomatology present in OCD. There are some dedicated self-report measures that focus broadly on anxiety disorders (e.g., Manual for the Multidimensional Anxiety Scale for Children [MASC], March, 1998; Revised Children’s Manifest Anxiety Scale, Second Edition [RCMAS-2], Reynolds & Richmond, 2008), but there has been a shortage of syndrome-specific scales for childhood OCD. The CMOCS is designed to fill this gap and be an adjunct to existing assessment strategies. The CMOCS allows the clinician to pinpoint the content and severity of a client’s obsessions and compulsions and their impact on daily functioning.

The three instruments listed in the following sections have been among the most common syndrome-specific instruments used for diagnosing OCD in children and adolescents (e.g., Langley et al., 2002; March et al., 2004). However, these instruments are probably best described as “research instruments,” and although they are used in clinical settings, there is limited information about their psychometric properties and limited normative data.

Children’s Yale-Brown Obsessive-Compulsive Scale (CY-BOCS)

The Children’s Yale-Brown Obsessive-Compulsive Scale (CY-BOCS; Goodman, Price, Rasmussen, Riddle, & Rapoport, 1991) has been widely used in research and some clinical settings to assess OCD in children. It is a semistructured interview administered by the clinician. It can be administered to the child or the parents and contains sections for obsessions and compulsions. Each section has a checklist for the presence, frequency, and duration of symptoms, as well as factors such as how much the symptoms interfere with functioning and cause distress. Separate scores are obtained for obsessions and compulsions, and can range from 0 to 20. A total score is also produced that can range from 0 to 40. A score greater than 15 is generally thought to reflect clinically significant OCD symptoms. Scahill et al. (1997) have provided preliminary evidence of the reliability and validity of the CY-BOCS. Factor analytic studies of the CY-BOCS have produced variable results (e.g., McKay et al., 2003; Storch et al., 2005), and no broadly accepted factor structure has been identified. In summary, the CY-BOCS is a popular instrument with preliminary evidence of reliability and validity.

Leyton Obsessional Inventory—Child Version (LOI-CV)

The Leyton Obsessional Inventory—Child Version (LOI-CV; Berg, Rapoport, & Flamant, 1986) is a 44-item self-report measure of obsessive symptoms. The items are printed on cards that the child sorts into Yes or No boxes. Berg et al. provided preliminary evidence of test-retest reliability and discriminant validity; however, convergent validity analyses failed to produce significant results. A 21-item epidemiological survey form was also developed (Berg, Whitaker, Davies, Flamant, & Rapoport, 1988) that also shows promising psychometric properties.

Child Obsessive-Compulsive Impact Scale—Revised (COIS-R)

The Child Obsessive-Compulsive Impact Scale—Revised (COIS-R; Piacentini, Peris, Bergman, & Chang, 2007) is a 56-item rating scale designed to assess the impact of OCD on the functioning of children and adolescents. Both parent and self-report forms are available to assess impairment in family, academic, and social settings. Piacentini et al. present preliminary evidence regarding the factor structure, reliability, and validity of these scales.

Benefits of the CMOCS

Each of these instruments has features that make it attractive for particular uses, but none combines into a single, easily administered self-report format the features of brevity and differentiated scoring that are offered by the CMOCS and that make it suitable for a broad range of uses. As noted earlier in this chapter, the strength of the CMOCS...
is that it offers a suitable tool for brief yet relatively detailed assessment across a variety of settings.

**User Qualifications**

Individuals using the CMOCS interpret its various components and use them in the evaluation, diagnosis, and treatment of emotional and behavioral disorders. Users are expected to have had formal academic training in the administration, scoring, and interpretation of objective self-report scales for clinical mental health assessment specifically with children and adolescents. They must also have had supervised experience with such instruments. Clinic support staff may, with appropriate training, administer and score the CMOCS. However, interpreting and otherwise using the results of the CMOCS require a level of knowledge and understanding of psychology and psychological and educational testing that is very difficult to obtain without graduate-level instruction. Although it is not possible to list all applicable titles and certifications, most individuals practicing in child clinical, clinical, school, pediatric, counseling, and related professional areas of psychology will have received such training.

Each individual practitioner must decide whether his or her formal academic training and supervised experience provide the necessary background and knowledge to use the CMOCS successfully and in a way that will not harm the client. Given the range of requirements for various licenses and certifications among the various states (as well as foreign countries), a determination of any individual’s qualifications to use the CMOCS should be competency based. Individuals from a variety of other professions, such as licensed professional counselors, clinical social workers, psychiatrists, and pediatricians, may be trained appropriately to use the CMOCS. Users of the CMOCS should be familiar with the most recent edition of the *Standards for Educational and Psychological Testing* (which, as of this writing, is AERA, APA, & NCME, 1999) and should be professionally licensed or have the appropriate certification required by their local laws governing the use of psychological tests.

**Summary**

In summary, the CMOCS is a reliable and valid measure of problematic obsessions and compulsions experienced by children and adolescents. Its features include the following:

- Brief administration (56 items) and easy scoring
- Self-report
- Easy-to-read items written at a mid-second-grade level
- Either individually or group administered
- Norm-referenced scores, based on a diverse community sample of 1,644 children and adolescents aged 8 to 19 years
- Interpretable at both summary and specific levels, yielding two Summary scores and six specific Problem Area scores
- Appropriate for use in a variety of potential applications in school, clinical, forensic, and research settings