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The Children's Yale-Brown Obsessive Compulsive Scale: Reliability and Validity for Use Among 5 to 8 Year Olds with Obsessive-Compulsive Disorder

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Abstract The Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS) is the instrument of choice for assessing symptom severity in older children (i.e., 8–18 years) diagnosed with obsessive-compulsive disorder (OCD). The reliability and validity of this measure for use among younger children (i.e., 5–8 years of age), however, has never been examined. The primary aim of this study was to examine this scale's use among those presenting with early childhood OCD. Forty-two children with OCD between the ages of 4 and 8 years of age were recruited as part of a larger treatment outcome study, and the reliability and validity of the CY-BOCS was examined. Results revealed questionable reliability for the measure's 5-item Obsessions subscale but good reliability (i.e., internal consistency, temporal stability) for the 5-item Compulsions subscale and 10-item total scale. Results also revealed that the CY-BOCS total scale demonstrated mixed discriminant validity but strong convergent validity and sensitive to change. Collectively, the 10-item, CY-BOCS total score yields a reliable and valid scale for the assessment of symptom severity in early childhood OCD. However, we urge caution in use of the Obsessions subscale in isolation for either clinical or research purposes. Limitations and future areas of research are discussed including the potential benefit of developing a measure of OCD-related symptom severity specifically for younger children with greater attention to developmental differences among children within this population.

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Childhood obsessive-compulsive disorder (OCD) is a debilitating disorder affecting 1.5 to 2.2 million children in the United States (Valleni-Basile et al. 1995; Zohar 1999). Empirical evidence suggests that a majority of children and adolescents also meet diagnostic criteria for an additional psychiatric disorder (e.g., 75-84%; Geller 2006). Childhood OCD is also associated with marked impairment in day-to-day functioning (Adams et al. 1994; Cooper 1996; Leonard et al. 1993; Toro et al. 1992). The majority of research focuses upon school-aged children and adolescents (e.g., 8 years of age and older). Scant research, however, has examined the phenomenology, assessment, and/or treatment of those with early childhood (e.g., 5–8 years of age) OCD (Freeman et al. 2007, 2008; Garcia et al. 2009). In particular, the assessment of early childhood OCD has received relatively little consideration.

The Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS; Scahill et al. 1997) is the most commonly used instrument for assessing OCD symptomatology and severity in children. The CY-BOCS is a 10-item clinician-rated, semi-structured instrument designed to assess OCD symptom severity over the past week. The scale consists of a symptom checklist providing an overview of commonly endorsed OCD-related symptoms (e.g., obsessions, compulsions). Items endorsed from this checklist inform responses to two, 5-item subscales assessing (1) Obsession and (2) Compulsion severity. Subscale scores are summed to yield a total score. It should be noted that an alternative two-factor model has also been proposed consisting of a 6-item Severity and 4-item Disturbance scale, rather than a CY-BOCS total score or Obsession and Compulsion

subscale scores (Storch et al. 2005). However, conclusions regarding the utility of this alternative model are tempered by the Disturbance subscale's poor internal consistency (i.e., $\alpha=0.47$). Also, use of the CY-BOCS total score compared to the Severity and Disturbance scales revealed commensurate convergent validity coefficients. These findings may allude to why the CY-BOCS total score and its respective Obsession and Compulsion subscales are still generally considered the gold standard approach to the assessment of OCD severity in nearly all randomized controlled trials of childhood OCD.

Scahill and colleagues (1997) found that the 10-item CY-BOCS total scale demonstrated very good internal consistency ($\alpha=0.87$), while the total scale and respective subscales demonstrated good to excellent inter-rater reliability among youth 8–17 years of age. The scale also demonstrated good convergent validity (e.g., Leyton Survey), discriminant validity (e.g., Child Depression Inventory, Revised Children's Manifest Anxiety Scale), and sensitivity to change (e.g., changes on CY-BOCS total score compared to clinical global improvement following treatment). Independent research groups have generally supported the scale's psychometric properties for use among older youths (Gallant et al. 2008; Storch et al. 2004; Yucelen et al. 2006). Only one study, however, has included children under the age of 8 in their analyses (Storch et al. 2004) yet these authors obtained data from only five children, representing 8.1% of the sample, under 8 years of age. Significant developmental differences (e.g., children's self-understanding) exist among very young children compared to older youths (Secord and Peevers 1974; Selman 1980). As a result, the current study aims to mirror the data analytic plan chosen by Scahill et al. (1997) to examine the psychometric properties of the CY-BOCS during early childhood.

Developmentally appropriate interviewing is requisite for the reliable and valid assessment of early childhood OCD (Garcia et al. 2009). It is likely, however, that the methods and procedures used for assessing OCD severity among older youths with OCD may not be as well suited for early childhood OCD. For example, younger children are less able to adequately describe or verbalize their anxiety symptoms. As a result, administration of the CY-BOCS for these younger children may place a greater reliance on parent-report of symptoms. Descriptions of specific symptom dimensions (e.g.. excessive concern regarding urine, feces, and saliva, excessively bothered by sticky substances or residues, need for symmetry/evening up) must also be tailored to the child's developmental level (i.e., worry or grossed out by pee, poop, or spit, don't like touching sticky things, like your toys or games lined up the same way). Contrary to how the CY-BOCS is designed, it may also be necessary to administer the Compulsions checklist/subscale prior to the Obsessions checklist/sub-

scale to facilitate better characterization of potential obsessive thoughts or images. These subtle modifications to administration of the CY-BOCS have been utilized in previous early childhood OCD research (e.g., Freeman et al. 2007, 2008; Garcia et al. 2009). However, it is not known whether these modifications aid in providing a reliable and valid assessment of OCD symptom severity among this population.

At present, no studies have examined the psychometric properties of the CY-BOCS for early childhood OCD. Consequently, it is unclear whether the measurement strategies used in extant studies examining early childhood OCD are adequate. Therefore, the primary objective of this study was to examine the reliability (e.g., internal consistency, temporal stability), validity (e.g., convergent, discriminant), and sensitivity to change of the CY-BOCS for administration to children between the ages of 5 and 8 years.

Methods

Participants

Participants were recruited as part of a randomized controlled trial examining the efficacy of family-based CBT compared to Relaxation Therapy (RT) for the treatment of children between the ages of 5 and 8 years with OCD (Freeman et al. 2008). Two children were age 4 at the time of consent/baseline. Both children turned 5 during the course of treatment. The study was conducted at a medical center in the New England region of the United States. Informed consent was obtained from all participants.

Briefly, inclusion in the current study required fulfillment of the following criteria: a primary diagnosis of OCD as assessed via a semi-structured interview (e.g., Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version [KSADS-PL]) administered jointly to the child and his/her parent(s); symptom duration of at least 3 months; Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS; Scahill et al. 1997) greater than 16; and at least one parent who was able to consistently attend weekly treatment sessions. Exclusion criteria included: other primary psychiatric disorder or co-primary/secondary diagnosis; pervasive developmental disorder; documented mental retardation; conduct disorder; acute suicidality; concurrent psychotherapy for OCD or behavioral parent training; treatment with psychotropic medication for OCD, attention-deficit hyperactivity disorder (ADHD), and/or tic disorders in which the dosage was not stable for 6 weeks prior to baseline evaluation; previously failed trial of CBT; and meeting research criteria for pediatric autoimmune neuropsychiatric disorders associated with streptococcal infection (PANDAS).

In total, 42 children met inclusion criteria for the current study. The sample was 57.1% girls ($n=24$), predominantly Caucasian (81%, $n=31$), and ranged in age from 4 to 8 years old ($M=6.7$, $SD=1.2$). The child's modal grade in school was first grade. Per administration of the KSADS-PL, specific phobia (14.3% $n=6$), ADHD (14.3%; $n=6$), tic disorder (i.e., Tourette's disorder, chronic motor or vocal tic disorder, transient tic disorder; 14.3%; $n=6$), generalized anxiety disorder (GAD; 11.9%; $n=5$), specific phobia (29.2%, $n=28$), and oppositional defiant disorder (9.5%, $n=4$) were the most common comorbid diagnoses. Given this study's exclusion criteria (see preceding paragraph), these comorbid diagnoses were secondary, not primary or co-primary.

Procedure

Children were referred to this study by pediatricians, school psychologists, and parents who suspected OCD or another anxiety disorder. Participants first completed a telephone screening. Families reporting possible OCD-related symptoms were invited to participate in an hour-long in-person screening. Those families reporting probable OCD symptoms during this interview were referred to the treatment study for further evaluation. At this evaluation, informed consent was obtained, KSADS-PL was administered, and baseline measures were obtained (e.g., CY-BOCS, Conners Parent Rating Scale etc.). A trained independent evaluator (IE; e.g., child clinical psychologists, child psychiatrists) blind to the family's treatment condition administered the CY-BOCS, jointly to both parent and child, and NIMH Global Rating Scales. Training for IEs involved formalized teaching, observation, and coding of taped gold-standard interviews. IEs did not evaluate study participants until he/she coded three or more reliability tapes to a criterion of 80% or higher. IE administered measures were obtained at baseline (week 0), week 6, and week 12 (post-treatment) assessments. In addition to these IE completed measures, parents and children were asked to complete additional measures assessing various psychiatric symptoms. Those measures pertinent to the current study (e.g., Conners Parent Rating Scale) are described below. Data reported herein make use of data obtained at the baseline assessment, unless otherwise noted. Depending upon the severity of the child's OCD-related symptoms and comorbidity, duration of this assessment ranged from 2 to 3 h.

Instruments

Children's Yale-Brown Obsessive-Compulsive Scale (CY-BOCS; Scahill et al. 1997). The CY-BOCS is a 10-item clinician-administered instrument assessing OCD obsessions (scores ranging from 0 to 20), compulsions (scores ranging from 0 to 20), and total (scores ranging from 0 to 40)

symptom severity in youths. Higher total and subscale scores indicate greater or more severe obsessions and/or compulsions. Past research suggests that the CY-BOCS is both a reliable and valid instrument for the assessment of symptom severity among older youths with OCD (Scahill et al. 1997).

Several modifications to the administration of the CY-BOCS were made in an effort to create a more developmentally sensitive assessment of OCD among children 5–8 years of age. First, parent and child were always jointly interviewed. Second, as a means of better facilitating discussion regarding intrusive thoughts or images, the Compulsions checklist of the CY-BOCS was administered prior to the Obsessions checklist. Finally, language used to describe respective symptom dimensions were tailored to the child's developmental level. Computation of Obsession, Compulsions, and Total scores did not differ from those outlined by Scahill and colleagues (1997).

Construct Validity

National Institutes of Mental Health-Global Rating Scales (NIMH-Global Rating Scales; Insel et al. 1983). The NIMH-Global Rating Scales are clinician-rated instruments designed to assess illness severity. Germane to the present investigation, distinct scales exist assessing *Depression* and *OCD* severity. Scale ranges from 1 (normal) to 15 (very severe) with anchors at various intervals providing operational definitions that correspond to symptom severity. For example, scores between 10 and 12 on the NIMH-OCD scale correspond to "*Severe OCD*. Symptoms that are crippling to the patient, interfering so that daily activity is 'an active struggle.' Patient may spend full time resisting symptoms. Requires much help from others to function." These scales demonstrate good inter-rater reliability and have been used in multiple treatment studies. For this study, the *NIMH-OCD* scale was used as a measure of *convergent* validity, while the *NIMH-Depression* scale was used as measures of *divergent* validity.

Conners Parent Rating Scale-Revised (Long Version) (CPRS-R; Conners et al. 1998). The CPRS-R is an 80-item parent-report of children's behavioral problems. The scale consists of a total score and multiple subscale scores (e.g., Cognitive Problems, Oppositional, etc.). The CPRS-R is used widely in both clinical and research settings. Research demonstrates that it is both a reliable and valid assessment of behavior problems for children between the ages of 3 and 17 years (Conners et al. 1998). For purposes of the current study, the CPRS-R total T-score as reported by mothers, which corresponds to DSM-IV symptoms of Inattentive and Hyperactive-Impulsive type ADHD, was used to assess *divergent* validity. The term CPRS-R (ADHD) total T-score will be used henceforth to provide a more useful description of this scale.

Data Analytic Plan

Reliability was calculated by computing the internal consistency (Cronbach's alpha) of the 10-item CY-BOCS as well as each of its 5-item subscales (e.g., Obsessions, Compulsions) for all 42 participants. To examine the temporal stability of the scale, Intraclass Correlation Coefficients (ICC) were used to examine the relationship between CY-BOCS total and subscale scores obtained at baseline (week 0) and week 6 assessments (M=57.5 days, SD=22.6). Because we anticipated that those in the RT condition would likely demonstrate less fluctuation in their OCD-related symptoms from baseline to week 6 as compared to those in the CBT condition, temporal stability estimates were obtained only from those children (and their families) receiving RT.

Discriminant validity was assessed by examining the relationship between the CY-BOCS Total score and NIMH-Depressions scale and the CPRS-R (ADHD) total T-scores. Convergent validity was assessed via examination of the relationship between baseline CY-BOCS Total score and the NIMH-OCD scale. Fisher's r to z transformation was used to examine differences between these correlations (Scahill et al. 1997).

Analysis of CY-BOCS sensitivity to change was possible via data obtained as part of the larger, treatment outcome study from which these data were collected (Freeman et al. 2008). Symptom change as measured via the CY-BOCS Total score was compared with change in clinical global improvement (CGI) using McNemar's test (Scahill et al. 1997). The ratio of treatment responders as determined via administration of the CY-BOCS at post-treatment (i.e., score less than 12) were compared to those classified as treatment responders on the CGI at post-treatment (i.e., "very much" or "much improved"). The proposed CY-BOCS cut point of less than 12 for "clinical remission" was chosen based on our groups (e.g., Freeman et al. 2008) previously published treatment outcome work with early childhood OCD and mirrors approach utilized in previous treatment outcome research among older populations of children with OCD (POTS 2004). It is possible that any failure to reject the null hypothesis, which would be considered support of the scale's sensitivity to change, could be explained by a lack of statistical power (e.g., small sample [N=42]). Therefore, we decided to conduct an additional analysis in which rejection of the null hypothesis (i.e., $p \leq 0.05$) would be requisite for support of the CY-BOCS' sensitivity to change. Using McNemar's test we examined the difference between children classified as treatment responders and non-responders to CBT only at week 6 and post-treatment assessments. We anticipated that those in the CBT condition would be most likely to demonstrate a greater degree of symptom fluctuation over the course of treatment and thereby provide a better basis for our comparison.

Results

Table 1 provides descriptive and inferential statistics germane to the analyses described below. Table 2 provides frequency distributions for individual scale items from the CY-BOCS. The mean CY-BOCS Total score was 22.2 (4.3) suggesting moderate to severe symptom severity. No statistically significant differences existed between boys (M=22.8, SD=4.5) and girls (M=21.7, SD=4.0). In addition, no statistically significant relationship was found between child age measured in months and CY-BOCS Total score (r=0.05, p=0.78).

Reliability Internal consistency estimates demonstrated adequate internal consistency for both the CY-BOCS Total scale (α=0.72) and the Compulsion subscale (α=0.71). However, the Obsession subscale demonstrated poor internal consistency (α=0.64). ICCs were conducted to examine the scale's temporal stability from week 0 (time 1) to week 6 (time 2). Results revealed strong correlations between scores of those in the RT treatment condition at time 1 and 2 for the CY-BOCS Total scale score (ICC= 0.79, p=0.001) and the Obsession (ICC=0.66, p=0.02) and Compulsion (ICC=0.89, $p \leq 0.001$) subscales. Collectively, these results suggest that the 10-item, CY-BOCS and Compulsion subscale demonstrate adequate reliability though the reliability (i.e., internal consistency, temporal stability [to a lesser extent]) of the Obsessions subscale is questionable. As a result, the validity of the CY-BOCS Total scale rather than its respective subscales is examined henceforth. This approach is analogous to that utilized by Scahill et al. (1997).

Construct Validity The CY-BOCS Total score demonstrated a strong relationship to the NIMH-OCD scale (r=0.63, p< 0.001).[1] The scale demonstrated no statistically significant correlation with the NIMH-Depression scale (r=0.12, p= 0.47) though yielded a significant, positive relationship to the CPRS-R (ADHD; r=0.34, p=0.04). Fisher's r to z transformation revealed variable differences between these correlations (z=1.91, p=0.06 for the comparison with the CPRS-R (ADHD) and z=2.24, p=0.02 for the comparison with the NIMH-Depression scale). Table 1 demonstrates

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[1] To more fully examine the convergent validity of the CY-BOCS, a partial correlation was calculated. The relationship between the CY-BOCs total score and NIMH-OCD scale was examined while controlling for CPRS (ADHD) total T-scores. Results again revealed a strong, statistically significant relationship, r (31)=0.57, p=0.001 between these two variables.

Table 1 Descriptive Statistics for obsessive-compulsive symptom severity, criterion measures of construct validity and correlations with CY-BOCS total and subscale scores

Measure	Number	Mean (SD)	Correlation with CY-BOCS total
CY-BOCS			
Obsessions	42	10.3 (2.5)	0.77*
Compulsions	41	11.9 (2.8)	0.82*
Total	42	22.2 (4.2)	–
NIMH-OCD	38	7.6 (1.8)	0.63***
NIMH-Depression	37	2.7 (1.9)	0.12
CPRS-R (ADHD) total T-score	38	57.9 (11.8)	0.34*

CY-BOCS Children's Yale-Brown Obsessive-Compulsive Scale; NIMH-OCD/Depression National Institute of Mental Health-Obsessive Compulsive Disorder/Depression Rating Scales; CPRS-R Conners Parent Rating Scale-Revised (Long Version)

* $p \leq 0.05$

*** $p < 0.001$

that the mean CPRS-R (ADHD) total T- and NIMH-Depression scores were each in the normal range (Conners et al. 1998). Collectively, these data support good convergent validity for the CY-BOCS Total scale and mixed results regarding the scale's divergent validity.

Sensitivity to Change Data obtained suggest that of the 42 participants in the randomized controlled trial of family-based CBT compared to RT, CY-BOCS Total score was consistent with information obtained via the CGI in assessing symptom change over time. Thirteen participants were classified as "responders" to treatment on both the CY-BOCS and CGI. Sixteen were classified as "non-responders" to treatment on both measures. In total, five participants demonstrated discordance (i.e., one participant was a "responder" on the CY-BOCS only, four participants

were "responders" on the CGI only). Results of McNemar's test using discordant pairs to evaluate systematic differences in methodology yielded no differences between the measures ($p=0.38$). Subsequently, McNemar's test was re-run utilizing only those children receiving family-based CBT ($n=20$). Children were classified as treatment responders and non-responders at both week-6 and at their post-treatment assessment. Results of McNemar's test yielded significant differences between the assessments at week-6 and post-treatment ($p=0.02$). Collectively, these results suggest that the CY-BOCS is sensitive to change in early childhood OCD.

Discussion

This is the first study to examine the reliability and validity of the CY-BOCS for the assessment of early childhood OCD. The data described herein suggest that the 10-item, CY-BOCS total score demonstrates good internal consistency, very good temporal stability, good construct validity, and sensitivity to change. Findings with respect to the reliability (i.e., internal consistency) of the Obsessions subscale were below minimum acceptable standards. Conversely, the Compulsion subscale exhibited good internal consistency and, in particular, temporal stability. Collectively, these findings indicate that the 10-item, CY-BOCS total score provides a clinically useful, reliable, and valid assessment of OCD symptom severity in young children though the development and refinement of other developmentally sensitive symptom severity measures will be important.

The reliable assessment of OCD is important from early childhood to late adulthood. Findings from this study suggest that the CY-BOCS total score can be used to

Table 2 Frequency distribution of individual items from the CY-BOCS

Scale item	Response				
	0 (none)	1	2	3	4 (severe)
Obsessions subscale					
Item 1 (Frequency)	–	18	23	8	2
Item 2 (Interference)	1	22	21	7	–
Item 3 (Distress)	1	8	27	14	1
Item 4 (Resistance)	1	4	23	17	6
Item 5 (Control)	–	4	19	23	5
Compulsions subscale					
Item 6 (Frequency)	1	7	25	15	2
Item 7 (Interference)	3	17	23	8	–
Item 8 (Distress)	1	1	15	28	6
Item 9 (Resistance)	1	2	15	19	14
Item 10 (Control)	1	2	11	27	10

reliably assess OCD-related symptoms in younger children (e.g., 5–8 years). However, it is also important to note that the internal consistency of the CY-BOCS Total score described herein (α=0.72) is lower than what has been reported in previous studies (e.g., Scahill et al. 1997, α= 0.87). While alternative explanations exist (e.g., differing methodology and procedures), this discrepancy may be the result of important developmental differences among these age cohorts. As a child develops and matures, he/she becomes better at or increases his/her capacity for identifying thoughts. The degree of variability in cognitive maturity, however, among 5 year olds and then again in comparing a 5 and an 8 year old may be quite dramatic. In turn, it may not be too surprising that the assessment of a younger child's obsessions is somewhat less reliable than observable behaviors (e.g., compulsions) that a parent can corroborate. Exacerbating this difficulty is the need to rephrase many CY-BOCS items for children at a first- or second grade reading level or younger and reliance on parent- rather than child-report. Among older youths, the opposite (e.g., reliance on child-report) may be true. Collectively, these explanations may help to account for, in particular, the Obsession subscales poorer internal consistency and in turn the CY-BOCS Total scale's somewhat lower reliability compared to previous research (Scahill et al. 1997; Storch et al. 2004; Yucelen et al. 2006). It is important to note, however, that the current study's research design does not allow for direct comparison of reliability estimates across disparate studies. Future research may wish to conduct such comparisons and seek to examine the significance of these apparent differences across samples and studies.

Despite the findings reported above with regards to use of the Obsessions subscale in isolation, the psychometric properties of the 10-item, CY-BOCS total score for use among younger children with OCD is strong. Findings from this study suggest that the CY-BOCS demonstrated good convergent validity with a frequently used criterion measure of OCD symptom severity (NIMH-OCD). Scahill et al. (1997) demonstrated analogous findings in their evaluation of the CY-BOCS among older youths. In fact, findings from this study in conjunction with those presented by Scahill et al. (1997) suggest that the CY-BOCS total score is sensitive to change for children from 5 to 17 years of age. This latter finding is particularly important as it suggests that the CY-BOCS total score remains an appropriate measure for use as a primary measure of treatment outcome. These findings do not suggest that researchers are advised to "leave well enough alone." In fact, the discussion put forth in the preceding paragraph highlights the importance of continued development of age sensitive instruments for the assessment of OCD symptoms. The development of normative measures for the assessment of early childhood OCD or

measures utilizing composite scores (e.g., child, mother, father) may be warranted. Researchers may also wish to collect open-ended data regarding specific obsessions and compulsions reported by a large sample of young children with OCD. In turn, factor analytic strategies may aid in creating a more refined, developmentally appropriate (e.g., items worded and tailored to young children) symptom checklist for early childhood OCD. Although such an approach is labor intensive, it may also lead to a revised version of the CY-BOCS that is more "user friendly" from both the perspectives of those interviewing patients (e.g., clinicians, clinical researchers) and those being interviewed (e.g., children and their parents). In the mean time, however, the CY-BOCS total score appears to provide a reliable and valid assessment of OCD symptom severity during early childhood.

Several limitations to the current study should be noted. First, compared to other studies examining the CY-BOCS, the current study's sample size is relatively small (N=42). Scahill and colleagues (1997) recruited 65 and Storch et al. (2004) recruited 61 children with OCD. Given the scant literature examining early childhood OCD, however, we feel that the sample size reported herein is adequate. In addition, previous research has examined the psychometric properties of the CY-BOCS (among older youths) with as few as 24 participants (Yucelen et al. 2006). Second, findings relating to the discriminant validity of the CY-BOCS total score were mixed. The strength of the relationship between the CY-BOCS and NIMH-OCD compared to the CY-BOCS and CPRS-R (ADHD) were not significantly different from one another. Findings relating to other measures (i.e., NIMH-OCD and NIMH-Depression, respectively), however, suggest clearer support for the scale's construct validity thereby suggesting that this is not a major limitation. Related to this latter point, however, it should be noted that NIMH-Depression scale scores were relatively low in the current sample. It is possible that this more restricted range of scores may have artificially enhanced the apparent divergent validity of the CY-BOCS. Ideally, we would have preferred to utilize a more extensive battery of measures assessing convergent and discriminant validity. It is equally important, however, to highlight that, in their seminal paper on the CY-BOCS, Scahill et al. (1997) used an identical number of criterion measures of validity. Given the relative dearth of measures designed to assess psychiatric symptoms among very young children, we believe that the number of criterion measures reported herein is acceptable. Collectively, we believe that the findings reported as part of this study provide preliminary support for the reliability and validity of the CY-BOCS total score for use among 5 to 8 year olds with OCD.

This study provides an important addition to what is known regarding the reliable and valid assessment of OCD

across the lifespan. These findings suggest that, while there is room for improvement, the CY-BOCS total score demonstrated adequate psychometric properties for the assessment of early childhood OCD. As alluded to above, however, researchers should continue to work on developmentally sensitive measures for OCD symptoms perhaps obtained from the perspective of multiple raters. Future research may also wish to reexamine the temporal stability of the CY-BOCS with young children utilizing untreated or subclinical sample of youths. Such examinations will help to further support the utility of the CY-BOCS for not only treatment outcome, but also large-scale epidemiological and/or longitudinal studies. In turn, researchers will obtain a more efficacious means by which to examine the trajectory of OCD over the lifespan. Knowledge obtained via this line of research will elucidate science's understanding of the etiology, maintenance, and treatment of this disorder.

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