

Ratings of Relations Between DSM-IV Diagnostic Categories and Items of the CBCL/6-18, TRF, and YSR

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Abstract

The purpose was to determine the degree to which experienced mental health professionals would judge particular CBCL/6-18, TRF, and YSR items as being consistent with particular DSM-IV categories. Child psychiatrists and psychologists who had published research on children's behavioral/emotional problems rated the consistency of each CBCL, TRF, and YSR problem item with DSM categories that are potentially relevant to school-age children. The 22 raters came from 16 cultures. Items that were rated by at least 14 of the 22 (64%) raters as being *very consistent* with a diagnostic category were assigned to that category. After combining some categories that had overlaps in DSM criteria, we constructed scales for the following categories: *Affective Problems* (including Dysthymia and Major Depression); *Anxiety Problems* (including GAD, SAD, and Specific Phobia); *Somatic Problems* (including Somatization and Somatoform); *Attention Deficit/Hyperactivity Problems* (including Hyperactive-Impulsive and Inattentive types); *Oppositional Defiant Problems*, and *Conduct Problems*. For each instrument, a DSM-oriented scale comprises the items from that instrument that were rated as being very consistent with the respective diagnostic category. The scales are displayed on profiles for scoring children in relation to normative samples of peers. The profiles show raw scale scores (sum of the 0-1-2 ratings of items comprising a scale); *T* scores; percentiles; and cutpoints for normal, borderline, and clinical ranges. Windows software for scoring the profiles can provide comparisons among DSM-oriented scale scores obtained from up to 8 CBCL/6-18, TRF, and YSR forms per child.

Introduction

Questions often arise about relations between formal diagnostic systems, such as the DSM, and empirically based instruments, such as the Child Behavior Checklist for Ages 6-18 (CBCL/6-18), the Teacher's Report Form (TRF), and the Youth Self-Report (YSR). Studies have shown significant associations between DSM diagnoses and scores on empirically based syndrome scales (e.g., Edelbrock & Costello, 1988; Kasius, Ferdinand, van den Berg, & Verhulst, 1997). However, the specific criteria for DSM diagnoses differ from the items of the empirically based scales. Furthermore, the associations that are found between diagnoses and scale scores may vary according to the training and orientation of the diagnosticians, the diagnostic procedures, the ages of the children, the sources of data, and other factors.

Purpose of this Project

The purpose of this project was to determine the degree to which experienced mental health professionals would judge particular CBCL/6-18, TRF, and YSR items as being consistent with particular DSM-IV diagnostic categories (American Psychiatric Association, 1994). To obtain sophisticated judgments, we asked highly experienced child psychiatrists and psychologists who had published research on children's behavioral/emotional problems to rate the consistency of each CBCL/6-18, TRF, and YSR problem item with DSM diagnostic categories of behavioral/emotional disorders that are potentially relevant to school-age children. If most ratings of particular CBCL/6-18, TRF, and YSR items were found to indicate high consistency with particular DSM categories, these items would be used to construct DSM-oriented scales for scoring the CBCL/6-18, TRF, and YSR. The DSM-oriented scales would accompany new versions of our empirically based syndrome scales for scoring these instruments.

Method

We identified the following DSM-IV diagnostic categories that are defined largely in terms of behavioral/emotional problems and that are potentially applicable to ages 6-18: Attention-Deficit/Hyperactivity Disorder (ADHD) Hyperactive-Impulsive and Inattentive types; Avoidant Personality; Conduct Disorder; Dysthymia; Generalized Anxiety Disorder (GAD); Major Depressive Disorder; Obsessive-Compulsive Disorder (OCD); Oppositional Defiant Disorder (ODD); Separation Anxiety Disorder (SAD); Somatization Disorder; Somatoform Disorder; and Specific Phobia. Because of similarities in criteria and/or findings from our study of ratings of preschool problems (Achenbach, Dumenci, & Rescorla, 2000), we combined the following disorders into single categories: Dysthymia and Major Depression were combined into Affective Disorders; GAD, SAD, and Specific Phobia were combined into Anxiety Disorders; and Somatization and Somatoform Disorders were combined into Somatic Disorders. We then did the following:

1. We invited participation by experienced child psychiatrists and psychologists who had published research on children's behavioral/emotional problems.
2. Those who agreed to participate were sent the following materials:
 - (A) Copies of the criteria for the DSM-IV diagnoses.
 - (B) The instructions that are presented in Appendix A.
 - (C) Rating forms on which the 141 problem items of the CBCL/6-18, TRF, and YSR were listed. The three instruments have 93 problem items in common, plus 12 problem items that are on the CBCL/6-18 and YSR, 3 that are common to the CBCL/6-18 and TRF, 10 that are specific to the CBCL/6-18, and 23 that are specific to the TRF. The total number of items rated was thus $93 + 12 + 3 + 10 + 23 = 141$, excluding open-ended items for adding other problems. For each of the nine DSM-IV categories, raters were asked to score each of the 141 problem items as $0 = \textit{not consistent}$, $1 = \textit{somewhat consistent}$, and $2 = \textit{very consistent}$ with the DSM category.

Appendix B lists the 22 child psychiatrists and psychologists from 16 cultures who submitted ratings. The raters had a mean of 19.1 years of experience since receiving their first doctorate or equivalent degree (several had both M.D. and Ph.D. degrees). Raters received \$50 for participating.

Results

We based our selection of items for DSM-oriented scales on a criterion of at least 14 raters out of 22 (64%) scoring an item 2 (*very consistent*) with a diagnostic category. We used a criterion of

≥14 ratings of 2 because it was high enough to require considerable agreement among raters, while still allowing for the effects of differences among the raters in culture, professional training, theoretical orientation, and the kinds of children served.

Only four items met the criterion of 14 ratings of 2 for Avoidant Personality and only three items for OCD. Consequently, we did not construct scales for these categories.

At least five problem items from each instrument received enough ratings of 2 to form the following six DSM-oriented scales (the numbers reflect the left-to-right sequence in which the scales are displayed on scoring profiles): 1. *Affective Problems*; 2. *Anxiety Problems*; 3. *Somatic Problems*; 4. *Attention Deficit/Hyperactivity Problems*; 5. *Oppositional Defiant Problems*; and 6. *Conduct Problems*.

Five TRF items received ≥14 ratings of 2 for the DSM Inattentive type of ADHD, while eight TRF items received ≥14 ratings of 2 for the Hyperactive-Impulsive type of ADHD. To reflect the distinction between ADHD subtypes, the TRF profile gives users the option of computing separate scores for each of these subsets of problems.

Table 1 lists abbreviated versions of the CBCL/6-18, TRF, and YSR items that comprise each scale. Six items met the criterion of ≥14 ratings of 2 for a second DSM-oriented scale in addition to the scale on which the items are listed in Table 1. However, the number of ratings of 2 was smaller for the second scale than for the scale on which the items are listed in Table 1. For four of the six items, the two scales were Conduct Problems and Oppositional Defiant Problems. These four items were as follows, with the number of 2 ratings shown in parentheses for the Conduct Problems scale and then for the Oppositional Defiant Problems scale: 15. *Defiant, talks back to staff* (14 vs. 20); 22. *Disobedient at home* (16 vs. 19); 23. *Disobedient at school* (16 vs. 18); and 28. *Breaks rules at home, school, or elsewhere* (22 vs. 17).

The other two items that met criteria for two scales were: 67. *Disrupts class discipline* (Attention Deficit/Hyperactivity Problems 18 vs. Oppositional Defiant Problems 14); and 100. *Trouble sleeping* (Affective Problems 20 vs. Anxiety Problems 15).

The six DSM-oriented scales are displayed on CBCL/6-18, TRF, and YSR hand-scored and computer-scored profiles analogous to the profiles for the empirically based scales (Achenbach & Rescorla, 2001). Normative distributions of scores, percentiles, and *T* scores are based on a new U.S. national sample. The computer-scored version of the TRF profile prints percentiles for the Inattention and Hyperactivity/Impulsivity subscales, as well as for the complete Attention Deficit/Hyperactivity Problems scale. On the hand-scored TRF profile, percentiles of the U.S. national normative sample are displayed for the subscales and for the complete Attention Deficit/Hyperactivity Problems scale.

Discussion

Empirically based and DSM-oriented scales scored by the same respondents for the same children on the same pool of items can facilitate assessment that takes account of both the patterns of co-occurring problems reflected in the empirically based syndromes and groupings of problems that are consistent with DSM diagnostic categories. Both types of scales can be quantitatively scored in terms of gender- and age-specific *T* scores and also in terms of raw scores indicating the absolute level of problems. This offers many possibilities for comparing and combining the empirically

based and DSM-oriented scales for purposes such as the following: Assessment of initial problems; evaluation of outcomes and differential treatment efficacy; epidemiological studies; genetic research; cross-cultural comparisons; and testing of correlates of psychopathology. The *Manual for the ASEBA School-Age Forms & Profiles* (Achenbach & Rescorla, 2001) provides further details of the development and applications of the empirically based and DSM-oriented scales.

References

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Table 1

CBCL/6-18, TRF, and YSR Items^a Rated by ≥ 14/22 Experts as Very Consistent with DSM-IV Categories

DSM-Oriented Category

1. Affective Problems	2. Anxiety Problems	3. Somatic Problems	4. ADH Problems	5. OD Problems	6. Conduct Problems
5. Enjoys little	11. Dependent	56a. Aches	4. Fails to finish ^l	3. Argues	15. Cruel to animals ^c
14. Cries	29. Fears	56b. Headaches	8. Can't concentrate ^l	15. Defiant ^{b, d}	16. Mean
18. Harms self	30. Fears school	56c. Nausea	10. Can't sit still ^{H-I}	22. Disobedient at home ^c	21. Destroys others' things
24. Doesn't eat well ^c	45. Nervous	56d. Eye problems	15. Fidgets ^{H-I}	23. Disobedient at school	26. Lacks guilt
35. Worthless	50. Fearful	56e. Skin problems	22. Difficulty with directions ^{b, d, l}	86. Stubborn	28. Breaks rules
52. Feels too guilty	112. Worries	56f. Stomach aches	24. Disturbs others ^{b, d, H-I}	95. Temper	37. Fights
54. Overtired		56g. Vomits	41. Impulsive ^{H-I}		39. Bad companions
60. Apathetic ^{b, d}			53. Talks out of turn ^{b, d, H-I}		43. Lies, cheats
76. Sleeps less ^c			67. Disrupts class ^{b, d, H-I}		57. Attacks
77. Sleeps more ^c			78. Inattentive ^l		67. Runs away ^c
91. Talks suicide			93. Talks much ^{H-I}		72. Sets fires ^c
100. Sleep problems ^c			100. Fails to carry out tasks ^{b, d, l}		73. Behaves irresponsibly ^{b, c}
102. Underactive			104. Loud ^{H-I}		81. Steals at home ^c
103. Sad					82. Steals outside home
					90. Swears
					97. Threatens
					101. Truant
					106. Vandalism ^c

^aItems are designated in the table with the numbers they bear on the CBCL/6-18, TRF, and YSR and summaries of their content.

^bNot on CBCL

^cNot on TRF

^dNot on YSR

^{H-I}TRF Hyperactivity-Impulsivity subscale

^lTRF Inattention subscale

Appendix A

Instructions to DSM Raters

Rating the Diagnostic Consistency of Specific Problems with DSM-IV Categories

Purpose

To determine whether problems listed on the CBCL/6-18, TRF, and YSR are diagnostically consistent with DSM disorders that might be found at ages 6 through 18 years.

Accompanying this instruction sheet are:

1. DSM-IV criteria for disorders that might be found at ages 6-18 years. In practice, you might not use some of the DSM diagnoses for children of these ages. However, we wish to see which problem items might be diagnostically consistent with the symptom criteria for the disorders, even if other factors argue against actually using the DSM diagnoses for ages 6-18 years.
2. A list of the problem items with spaces for rating the diagnostic consistency of each item with each DSM category. The first 118 items are on the CBCL/6-18. Most are also on the TRF and YSR. They are followed by items that are only on the TRF.

Instructions

If you are willing, please follow these steps:

1. Starting with the first problem on the list, consider its consistency with the first category of disorders, Affective Disorders, including Dysthymia and Major Depressive Episode. Consult the accompanying DSM-IV criteria for Dysthymia and Major Depressive Episode.
2. Decide whether you think the first problem is diagnostically consistent with either of the Affective Disorders.
 - (A) Please use the DSM-IV symptom criteria as a basis for deciding whether a problem is consistent with a category.
 - (B) You may feel that some problem items are appropriate diagnostic indicators of particular disorders, but that they do not have precise counterparts among the DSM-IV symptom criteria. Feel free to rate these problem items as being consistent with the categories, according to the scoring rules listed in #3.
3. Please rate how consistent the problem is with the Affective Disorders category, as follows:
 - 0 = Not consistent with the category.
 - 1 = Somewhat consistent with the category.
 - 2 = Very consistent with the category.
4. After you have rated the consistency of the first problem item with the Affective Disorders category, rate the consistency of each other problem item with each category specified on the rating form. You may prefer to rate the first item for all categories before proceeding to the second item, i.e., work from left to right. Or you may prefer to rate all items for the first category before rating any items for the second category, i.e., proceed from top to bottom.
5. Feel free to rate an item 0, 1, or 2 for any category, regardless of the ratings you give that item for the other categories. For example, you can give an item a rating of 0 for three categories, 1 for four categories, and 2 for two categories. In other words, do not spend

time choosing a single category for your highest rating of an item. Instead, just consider each category alone when rating each problem item. You may decide that some problem items should be rated 0 for all categories, whereas other problem items should be rated 2 for several categories.

6. After you have finished your ratings, please enter the other requested information at the end of the rating forms. Then e-mail the rating form to Thomas.Achenbach@uvm.edu or fax it to 802-656-2602. We will then mail your check for \$50.

Thanks very much for your help.

Appendix B

Child Psychiatrists and Psychologists Who Rated CBCL/6-18, TRF, and YSR Items for Consistency With DSM-IV Categories

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